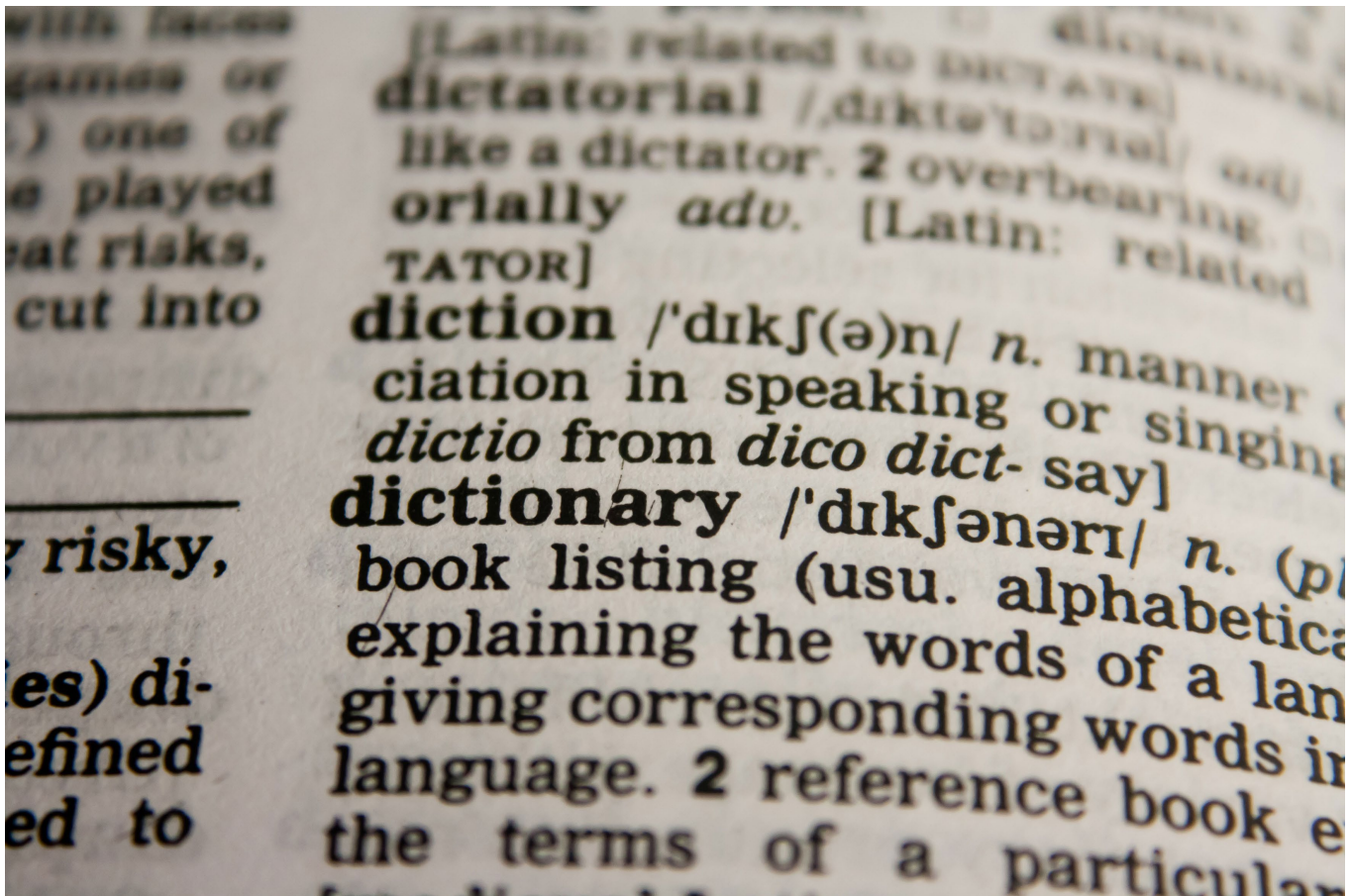


Milo's Nerdary



Nerdary with lexicons of programming
language reserved and keywords
and TTRPG

Milo's Nerdary

Dictionary with lexicons of computer
programming language reserved and
keywords
and TTRPG

Book: Milo's Nerdary
and lexicon of computer programming language reserved and key words
and table top role playing games

Author: Milo

Edition: 0.179

Date: 11 February 2024

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Note that the lexicons follow the dictionary.

Note that the lessons on computer programming are in the topics area that follows the dictionary.

Note that this PDF keeps being updated with new editions. You may want to check once a week or once a month for the most recent edition.

Located at <https://www.thissideofsanity.com/nerdary/nerdary.pdf>

introduction
stories
cooking on a budget
games
Table Top Role Playing Games (TTRPGs)
Natives, colonization, and genocide
my music
start of dictionary
topics
start of lexicons
start of shell scripting and system administration
start of how to program computers
human rights

I know that items or portions of an item from an upcoming page will ghost at the bottom of a page. This is a problem with Adobe's piss poor programming. If someone wants to financially support the project, I will gladly make a PDF creating program that works.

Milo's Nerdary

opening material

including a lexicon of computer programming language reserved and keywords and TTRPG

Copyright © 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023 Milo (includes material from previous works)

A dictionary and other materials for nerds (including a lexicon of computer programming language reserved and keywords plus Table Top Role Playing Games).

The suffix *-ary* means “a thing belonging to or connected with.” So a nerdary is a book or other media belonging to or connected with nerds.

This work started as a dictionary of computer-related terms. I know it is absurd to think that I could reasonably complete this work, but Peter Mark Roget didn't release his Thesaurus until he was 73 years old (29 April 1852). He started work on it in 1805.

This work evolved into a nerdary when it changed from a single topic dictionary to a collection of information that I find useful and/or interesting. Hence, a nerdary.

Now including a section on Table Top Role Playing Games (TTRPG) in response to Hasbro ruining D&D.

I know that items or portions of an item from an upcoming page will ghost at the bottom of a page. This is a problem with Adobe's piss poor programming. If someone wants to financially support the project, I will gladly make PDF creating program that works.

When you see me criticize past actions, whether by a political party, a government, a religion, academia, or any other social entity, I am not criticizing or insulting you.

Note that the dictionary follows the language lexicons.

You can use any of the buttons here to skip over introductory materials

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cooking on a budget
games
Table Top Role Playing Games (TTRPGs)
Natives, colonization, and genocide
my music
start of dictionary
topics
start of lexicons
start of shell scripting and system administration
start of how to program computers
start of thought experiment
human rights

legal notes

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Libya

formats and other notes

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A little more than two decades ago, a brand new Wikipedia took at least five of my web pages and used them as their entire web page. Initially they gave my website credit, but they removed the credit after a year or two. Yes, they added to my materials, but they didn't remove my material when they took away my credit.

I am using materials from Wikipedia, but they give permission under their license. And unlike the rich people who run Wikipedia I am giving them credit, because I'm not rich, so I'm honest.

External links are marked like [this](#).

Images: I am making liberal use of the royalty free artwork at Pixabay. I am including all of the artist credits (although emojis are being dropped until I figure out how to get them into a PDF).

Wikis: Initially I intend to make use of information from Wikis, including Wikipedia, to quickly get initial information into the drafts of this book, but depending on how things move forward and your feedback, I may keep some amount of this material and just credit the correct source and license.

Game copyrights: I am going to quote here from the US Copyright Office:

Copyright does not protect the idea for a game, its name or title, or the method or methods for playing it. Nor does copyright protect any idea, system, method, device, or trademark material involved in developing, merchandising, or playing a game. Once a game has been made public, nothing in the copyright law prevents others from developing another game based on similar principles. Copyright protects only the particular manner of an author's expression in literary, artistic, or musical form.

Material prepared in connection with a game may be subject to copyright if it contains a sufficient amount of literary or pictorial expression. For example, the text matter describing the rules of the game or the pictorial matter appearing on

the gameboard or container may be registrable.

If your game includes any written element, such as instruction or directions, the Copyright Office recommends that you apply to register it as a literary work. Doing so will allow you to register all copyrightable parts of the game, including any pictorial elements. When the copyrightable elements of the game consist predominantly of pictorial matter, you should apply to register it as a work of the visual arts.

—Library of Congress, US Copyright Office, FL-108 (04/2016)

SDRs: I am including information from SDRs released by Wizards of the Coast under one of the Open Game Licenses.

I was placing the legal notice for d20 SDR Game System License after each quotation, but it adds too much extraneous repeated info, so now it is here just once:

Legal Disclaimer

This SRD reference Requires the use of the Dungeons & Dragons Player's Handbook Third Edition, published by [Wizards of the Coast, Inc.](#)

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The System Reference Document authors are: Jonathan Tweet, Monte Cook, Skip Williams, based on original material by E. Gary Gygax and Dave Arneson. It was edited and reformatted by The Bishop based on previous formats by Bombshell and the dynamic duo of Sage & Sovellor. The document has been further adapted by the [Dragon.ee crew](#).

Recipe copyrights: I am going to quote here from the US Copyright Office:

How do I protect my recipe?

A mere listing of ingredients is not protected under copyright law. However, where a recipe or formula is accompanied by substantial literary expression in the form of an explanation or directions, or when there is a collection of recipes as in a cookbook, there may be a basis for copyright protection. Note that if you have secret ingredients to a recipe that you do not wish to be revealed, you should not submit your recipe for registration, because applications and deposit copies are public records.

A recipe is a statement of the ingredients and procedure required for making a dish of food. A mere listing of ingredients or contents, or a simple set of directions, is uncopyrightable. As a result, the Office cannot register recipes consisting of a set of ingredients and a process for preparing a dish. In contrast, a recipe that creatively explains or depicts how or why to perform a particular activity may be copyrightable. A registration for a recipe may cover the written description or explanation of a process that appears in the work, as well as any photographs or illustrations that are owned by the applicant. However, the registration will not cover the list of ingredients that appear in each recipe, the underlying process for making the dish, or the resulting dish itself. The registration will also not cover the activities described in the work that are procedures, processes, or methods of operation, which are not subject to copyright protection.

Examples:

Jules Kinder submits an application to register a cookbook, *Pie in the Sky*. In the “Author Created” field of the application, Kinder asserts a claim in “text, photographs, and compilation of ingredients.” Each recipe contains a list of ingredients, instructions for making a pie, and a photograph of the finished product. The claim in a “compilation of ingredients” will not be accepted because there is no copyrightable authorship in a mere listing of ingredients. Since this claim is not acceptable, the Office may communicate with Jules Kinder to limit the extent of the registration to the text and photographs only.

Paulina Neumann submits an application to register a recipe for caesar salad dressing. In the “Author Created” field, Neumann asserts a claim in “text.” The work consists of a list of eleven ingredients with the following instructions: “(1) puree anchovies, garlic, Dijon, egg yolks; (2) drizzle oil in gradually to emulsify; (3) add lemon, parmesan cheese, salt, pepper, Worcester-shire and tabasco sauce.” The Office will refuse registration for this work, because the list of ingredients is uncopyrightable, and the instructional text contains an insufficient amount of creative authorship.

—Library of Congress, US Copyright Office, Circular 33

Artificial Intelligence copyrights: I am going to quote here from the US Copyright Office:

Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence

AGENCY: U.S. Copyright Office, Library of Congress.

ACTION: Statement of policy.

SUMMARY: The Copyright Office issues this statement of policy to clarify its practices for examining and registering works that contain material generated by the use of artificial intelligence technology.

DATES: This statement of policy is effective March 16, 2023.

FOR FURTHER INFORMATION CONTACT: Rhea Efthimiadis, Assistant to the General Counsel, by email at meft@copyright.gov or telephone at 202-707-8350.

SUPPLEMENTARY INFORMATION:

I. Background

It will take me some time to get this moved over. The main point is that AI generated material is not copyrightable. All AI generated material in this work is clearly identified and is excluded from any copyright claims.

The Copyright Office (the “Office”) is the Federal agency tasked with administering the copyright registration system, as well as advising Congress, other agencies, and the Federal judiciary on copyright and related matters.^[1] Because the Office has overseen copyright registration since its origins in 1870, it has developed substantial experience and expertise regarding “the distinction between copyrightable and noncopyrightable works.”^[2] The Office is empowered by the Copyright Act to establish the application used by applicants seeking registration of their copyrighted works.^[3] While the Act identifies certain minimum requirements, the Register may determine that additional information is necessary for the Office to evaluate the “existence, ownership, or duration of the copyright.”^[4] Because the Office receives roughly half a million applications for registration each year, it sees new trends in registration activity that may require modifying or expanding the information required to be disclosed on an application.

One such recent development is the use of sophisticated artificial

intelligence (“AI”) technologies capable of producing expressive material.^[5] These technologies “train” on vast quantities of preexisting human-authored works and use inferences from that training to generate new content. Some systems operate in response to a user’s textual instruction, called a “prompt.”^[6] The resulting output may be textual, visual, or audio, and is determined by the AI based on its design and the material it has been trained on. These technologies, often described as “generative AI,” raise questions about whether the material they produce is protected by copyright, whether works consisting of both human-authored and AI-generated material may be registered, and what information should be provided to the Office by applicants seeking to register them.

II. The Human Authorship Requirement

III. The Office's Application of the Human Authorship Requirement

IV. Guidance for Copyright Applicants

A. How To Submit Applications for Works Containing AI-Generated Material

B. How To Correct a Previously Submitted or Pending Application

V. Conclusion

This policy statement sets out the Office’s approach to registration of works containing material generated by AI technology. The Office continues to monitor new factual and legal developments involving AI and copyright and may issue additional guidance in the future related to registration or the other copyright issues implicated by this technology.

Dated: March 10, 2023.

Shira Perlmutter,

Register of Copyrights and Director of the U.S. Copyright Office.

Footnotes

—[Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence](#) A Rule by the Copyright Office, Library of Congress on 03/16/2023

Stanford CS Education Library

Some materials are quoted from the Stanford CS Education Library.

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I hope you enjoy this. I would greatly appreciate **feedback**. At the time of writing this edition, the best place is at the Twitter account [@TSOStheband](https://twitter.com/TSOStheband) (which includes a lot of different subjects, including political views you may despise).

Even if you don't want to provide feedback and criticism of the content, you can at least point out the writing mistakes.

introduction

personal introduction

A dictionary and other materials for nerds (including a lexicon of computer programming language reserved and keywords plus instruction on how to write code and Table Top Role Playing Games).

The suffix *-ary* means “a thing belonging to or connected with.” So a nerdary is a book or other media belonging to or connected with nerds.

This work started as a dictionary of computer-related terms. I know it is absurd to think that I could reasonably complete this work, but Peter Mark Roget didn't release his Thesaurus until he was 73 years old (29 April 1852). He started work on it in 1805.

Now including a section on Table Top Role Playing Games (TTRPG) in response to Hasbro ruining D&D.

the reason you will probably hate me and what I say:

Members of the American Nazi, Democratic, Libertarian, and Republican parties (including paid spokespersons of the Democratic Party) have used eugenics slurs (idiot, imbecile, moron, etc.) and some have specifically called for my imprisonment or execution for the views I express. This is common.

Eugenics is the claim that science shows that society is improved by sterilizing or executing those with so-called defective genes.

Eugenics was created by Francis Galton, popularized by Andrew Carnegie, and taken to its logical extreme by Adolf Hitler.

While some large groups of people (such as the Romani, the Jews, Native Americans, Black people, and Hispanic people) have been the targets of eugenics, the first target is always those who are considered “deformed”, mentally handicapped, or physically handicapped.

One particular target is those who have autism. The term Asperger’s Syndrome as a description of mild autism has been dropped by the medical field because it comes from Nazi Doctor Hans Asperger, who invented the Nazi demarcation line between those who have mild enough autism to just be sterilized and those whose autism is severe enough that they must be executed.

The US Supreme Court’s 2 May 1927 *Buck vs. Bell* decision [*Buck v. Bell*, 274 U.S. 200, 47 §. Ct. 584, 71 L. Ed. 1000 (1927)] upheld a Virginia law that provided for the eugenic sterilization of people considered genetically unfit. This was before Hitler even came into power.

Eugenics is a form of genocide, as defined in Article II (d) of the Convention on the Prevention and Punishment of the Crime of Genocide (the entire treaty is included in this book).

International Genocide Treaty

The US Supreme Court’s 1 June 1942 *Skinner vs. Okoma* decision [*Skinner v. Oklahoma ex rel. Williamson*, 316 U.S. 535 No. 782 (1942)] said that because procreation is a fundamental right, the state can’t require the sterilization of criminals convicted of certain crimes. The court did not eliminate forced sterilizations, but required that court ordered sterilization be subject to the requirements of strict scrutiny.

The US Supreme Court’s 28 March 1978 *Stump v. Sparkman* decision [*Stump v. Sparkman*, 435 U.S. 349 No. 76-1750 (1978)] said that a woman sterilized by court order while a teenager and without her knowledge or right to appear in court on her own behalf can not sue the judge under judicial immunity because court ordered sterilization is a **duty** of a judge and even if improperly exercised, the victim can not sue the judge.

Let me emphasize that every judge accepted the duty to commit human genocide when they accepted the judicial office of judge.

I have autism. I am one of the people that Hitler and every judge in the United States wanted sterilized or executed.

Deep hatred of neurodivergent people like me is deeply embedded into society.

When I was growing up as a child, other children would routinely assert that I should never have children because I was “weird”.

Members of the American Nazi, Democratic, Libertarian, and Republican parties (including paid spokespersons of the Democratic Party) have used eugenics slurs (idiot, imbecile, moron, etc.) and some have specifically called for my imprisonment or execution for the views I express.

I am officially subhuman and do not qualify as a legally valid person (unlike a legally valid corporate person, I have not submitted paperwork, paid a fee, and received government permission to be a person and we know from the Supreme Court's *Scott v. Sandford* case that judges and lawyers oppose the personhood of oppressed minorities) nor as a member of the human species (see Adolph Hitler's *Mein Kampf*).

My direct family lineage includes several European nationalities, as well as Jewish, Black, Asian, and Native American. And my personal religion is a form of Witchcraft (Kemetic) that major Abrahamic religions consider a death penalty offense against their deity.

So, don't be surprised when you see a bunch of opinions that make you want to call for me to be tortured, imprisoned, or killed.

At the time of this writing, a Google search on Milo's Nerdary (by specific name) will not show the existence of this PDF. Elon Musk changed the algorithm on Twitter so that my tweets are buried because he claims that my poverty means I am not a verified human.

When people hear me speak out against the Democrats, they accuse me of being fascist or Republican. When people hear me speak out against the Republicans, they accuse me of being Marxist or Democrat. I oppose all of America's far right political parties, including the American Independent, American Nazi, Constitution, Democrat, Libertarian, and Republican.

Computers are logic machines. A program must be mathematical truth to work properly. I hope for a day when all societies are based on truth.

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Note that the language lexicons follow the dictionary.

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0 zero
1 one
2 two
3 three
4 four
5 five
6 six
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9 nine
control codes
NULL
SOH (start of heading)
STX (start of text)

ETX (end of text)
EOT (end of transmission)
SEL (select)
ENQ (enquiry)
ACK (acknowledge)
RNL (require new line)
BELL
BS (backspace)
GE (graphic escape)
HT (horizontal tabulation)
SPS (superscript)
LF (line feed) or NL (new line)
RPT (repeat)
VT (vertical tabulation)
FF (form feed)
CR (carriage return)
SO (shift out)
SI (shift in)
DLE (data link escape)
DC1 (device control 1) or XON (transmit on)
DC2 (device control 2) or TAPE
DC3 (device control 3) or XOFF (transmit off)

DC4 (device control 4) or TAPE
RES/ENP (retore, enable presentataion)
NAK (negative acknowledge)
NL (new line)
SYNC (synchronous idle)
ETB (end of transmission block)
POC (program operator control)
CAN (cancel)
EM (end of medium)
SUB (substitute)
UBS (unit backspace)
ESC (escape)
CU1 (customer use one)
FS (file separator)
GS (group separator)
RS (record separator)
US (unit separator)
IUS/ITB (intermediate transmisson block)
DS (digit select)
SOS (start of significance)
FS (field separator)
WUS (word underscore)

DEL (delete)
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- (minus sign)
* (multiplication)
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= (equals sign)
> (greater than sign)
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␣ (space character)
! (exclamation mark)
" (quotation mark)
(number sign)
\$ (dollar sign)
% (percent sign)
& (ampersand)
' (apostrophe)
((left parenthesis)
) (right parenthesis)
* (asterisk)
+ (plus sign)

, (comma)
- (hyphen)
. (period)
/ (forward slash)
: (colon)
; (semicolon)
< (less than sign)
= (equals sign)
> (greater than sign)
? (question mark)
@ (commercial at sign)
[(left square bracket)
\ (backslash)
] (right square bracket)
^ (circumflex accent)
_ (underscore)
` (grave accent)
{ (left curly bracket)
 (vertical line)
} (right curly bracket)
~ (tilde)
μ (micro)

Greek alphabet
Greek alpha A α
Greek beta B β
gamma Γ γ
delta Δ δ
epsilon E ε
zeta Z ζ
eta H η
theta Θ θ ϑ
iota I ι
kappa K κ
lam(b)da Λ λ
mu M μ
nu N ν
xi Ξ ξ
omicron O o
pi Π π ϖ
rho P ρ
sigma Σ σ ς
tau T τ
upsilon Υ υ Ὑ
phi Φ φ

chi X χ
psi $\Psi \psi$
omega $\Omega \omega$
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order of evaluation
statements
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blocks
compounds tatements
conditional statements
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interative statements and iterators
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immediate threats
calm down
assess situation
plan
pattern for survival

psychology of survival
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Note that the language lexicons follow the dictionary.

emergency message

Comment from Milo: I don't have money. A close friend, Annie, is going through some horrible times. I need to gather some money to help her.

I do have programming and writing skills. I am gathering together materials I previously created and writing a whole bunch of new stuff, including lessons on how to program computers.

I am giving those lessons away for free. You can contact me directly through the contact form at the Twitter account [@TSOStheband](#) (which includes a lot of different subjects, including political views you may despise). My hope is to generate enough interest in this electronic PDF book that enough people will see it that a small portion will be willing to donate at [Help Annie GoFundMe page](#).

The lessons are free. Donations are completely optional. None of the money is for me, all of it is for Annie. She is a fantastic person. She really is.

IMPORTANT NOTE:

From [Help Annie GoFundMe page](#):

I'm Jeff, and I'd like to help a friend, Annie, who is suffering from depression and recovering from domestic abuse. She is having a tough time keeping a roof over her head, and is scheduled to be evicted on Monday or Tuesday. So I'm trying to raise money so she can move out from the motel and get into something more stable.

She's in the state of Virginia, and me and another friend of hers (Milo) are in California and are trying to raise money to, 1 - keep a roof over her head, and 2 - get her into a better place. The Virginia Rent Relief Program was going to pay her rent, but fell through at the last

minute because they won't pay for a motel.

So, the most immediate problem is paying for her motel, which is \$312 a week. Then she needs help with a first and last, etc... to move into something more stable.

I've suffered from severe depression before, and I know how horrible it is. I'd love to pay for everything, but I'm only barely getting by myself. So I'm asking for help for her.

Thank you for your time, and anything you can do to help her!

~Jeff

start of dictionary

start of dictionary

The start of the dictionary.

Note that the dictionary follows the language lexicons.

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D d
E e
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H h
I i
J j
K k
L l
M m
N n
O o
P p
Q q
R r
S s

T t
U u
V v
W w
X x
Y y
Z z
digits 0 1 2 3 4 5 6 7 8 9
0 zero
1 one
2 two
3 three
4 four
5 five
6 six
7 seven
8 eight
9 nine
control codes
NULL
SOH (start of heading)
STX (start of text)

ETX (end of text)
EOT (end of transmission)
SEL (select)
ENQ (enquiry)
ACK (acknowledge)
RNL (require new line)
BELL
BS (backspace)
GE (graphic escape)
HT (horizontal tabulation)
SPS (superscript)
LF (line feed) or NL (new line)
RPT (repeat)
VT (vertical tabulation)
FF (form feed)
CR (carriage return)
SO (shift out)
SI (shift in)
DLE (data link escape)
DC1 (device control 1) or XON (transmit on)
DC2 (device control 2) or TAPE

DC3 (device control 3) or XOFF (transmit off)
DC4 (device control 4) or TAPE
RES/ENP (retore, enable presentataion)
NAK (negative acknowledge)
NL (new line)
SYNC (synchronous idle)
ETB (end of transmission block)
POC (program operator control)
CAN (cancel)
EM (end of medium)
SUB (substitute)
UBS (unit backspace)
ESC (escape)
CU1 (customer use one)
FS (file separator)
GS (group separator)
RS (record separator)
US (unit separator)
IUS/ITB (intermediate transmisson block)
DS (digit select)
SOS (start of significance)
FS (field separator)

WUS (word underscore)
DEL (delete)
mathematical operators
+ (plus sign)
- (minus sign)
* (multiplication)
/ (division)
< (less than sign)
= (equals sign)
> (greater than sign)
punctuation and symbols
␣ (space character)
! (exclamation mark)
" (quotation mark)
(number sign)
\$ (dollar sign)
% (percent sign)
& (ampersand)
' (apostrophe)
((left parenthesis)
) (right parenthesis)
* (asterisk)

+ (plus sign)
, (comma)
- (hyphen)
. (period)
/ (forward slash)
: (colon)
; (semicolon)
< (less than sign)
= (equals sign)
> (greater than sign)
? (question mark)
@ (commercial at sign)
[(left square bracket)
\ (backslash)
] (right square bracket)
^ (circumflex accent)
_ (underscore)
` (grave accent)
{ (left curly bracket)
 (vertical line)
} (right curly bracket)
~ (tilde)

μ (micro)
Greek alphabet
Greek alpha Α α
Greek beta Β β
gamma Γ γ
delta Δ δ
epsilon Ε ε
zeta Ζ ζ
eta Η η
theta Θ θ ϑ
iota Ι ι
kappa Κ κ
lam(b)da Λ λ
mu Μ μ
nu Ν ν
xi Ξ ξ
omicron Ο ο
pi Π π ϖ
rho Ρ ρ
sigma Σ σ ς
tau Τ τ
upsilon Υ υ Ϛ

phi Φ ϕ
chi X χ
psi Ψ ψ
omega Ω ω
emergency message
topics
Unix and Linux System Administration and Shell Programming
Chapter 0 Unix and Linux Administration and Shell Programming
Chapter 1 cool shell tricks for Unix, Mac OS X, and Linux
Chapter 2 basics of computers
Chapter 3 Unix and Linux history
Chapter 4 choice of shells
Chapter 5 connecting to a shell
Chapter 6 shell basics
Chapter 7 login/logout
Chapter 8 passwd
Chapter 9 command structure
Chapter 10 quick tour of shell commands
Chapter 11 man
Chapter 12 cat
Chapter 13 command separator
Chapter 14 less, more, pg

Chapter 15 file system basics
Chapter 16 pwd
Chapter 17 command history
Chapter 18 built-in command
Chapter 19 ls
Chapter 20 cd
Chapter 21 cp
Chapter 22 mv
Chapter 23 rm
Chapter 24 shred
Chapter 25 mkdir
Chapter 26 alias
Chapter 27 pipes
Chapter 28 scripts
Chapter 29 sysadmin and root/superuser
Chapter 30 sudo
Chapter 31 su
Chapter 32 who
Chapter 33 advanced file systems
Chapter 34 major directories
Chapter 35 Network File System (NFS)

Chapter 36 tail
Chapter 37 wc
Chapter 38 chmod
Chapter 39 chown
Chapter 40 shell levels and subshells
Chapter 41 substitutions
Chapter 42 command substitutions
Chapter 43 arithmetic substitutions
Chapter 44 flow control
Chapter 45 management tools
Chapter 46 df
Chapter 47 du
Chapter 48 processes
Chapter 49 ps
Chapter 50 kill
Chapter 51 nice
Chapter 52 w
Chapter 53 date
Chapter 54 uname
Chapter 55 uptime
Chapter 56 top
Chapter 57 lsof

Chapter 58 free
Chapter 59 vmstat
Chapter 60 polkit
Chapter 61 defaults
Chapter 62 init
Chapter 63 sendmail
Chapter 64 ifconfig
Chapter 65 arp
Chapter 66 netstat
Chapter 67 route
Chapter 68 ping
Chapter 69 nslookup
Chapter 70 traceroute
Chapter 71 ftp and sftp
Chapter 72 cURL
Chapter 73 sysstat
Chapter 74 at
Chapter 75 back ups
Chapter 76 tar
Chapter 77 touch
Chapter 78 find
Chapter 79 text processing

Chapter 80 basename
Chapter 81 sed
Chapter 82 awk
Chapter 83 screencapture
Chapter 84 signals
Chapter 85 kernel modules
Chapter 86 LAMP
Chapter 87 mysql
Chapter 88 PHP
Chapter 89 Perl
Chapter 90 Tcl
Chapter 91 installing software from source code
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Chapter 3 kinds of programs
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Chapter 5 standards and variants
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definition
classical logic
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Boolean algebra and logic
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history
source code
identifiers
keywords
literals
constants
operators and separators
white space
new lines
comments
preprocessor
declarations
types
symbols
logical types
numeric types

integer types
real types
complex types
character types
string types
relational operators and ordered types
pictures and formats
pointer types
reference and dereference
access types
dynamic storage
vector types
matrix types
array types
table types
ranges
enumeration types
tuples
sets
structure types
uniontypes
record types with discriminants

hashes
lists
stacks
queues
dictionaries
objects
function types
void types
user defined types
files
scope and visibility
conversions
expressions
primary expressions
postfix expressions
unary expressions
binary operator expressions
logical operator expressions
logic assertions
conditional expressions
assignment expressions

sequential expressions
constrant expressions
order of evaluation
statements
expression statements
arithmetic statements
labeled statements
blocks
compounds tatements
conditional statements
loops
interative statements and iterators
case statements
break and continue statements
return statements
goto statements
low-level statements
null statements
conditions
exceptions
errors
procedures

functions
recursion
methods
lambdas
input statements
output statements
database statements
classes
modules
packages
generic units
reflection
operations
resources
globals
concurrent execution
tasks
semaphores
asynchronous message passing
remote procedure call
rendezvous
virtualmachines

low-level programming
standard library
standard language additions
character processing functions
string processing functions
memory functions
input output functions
storage allocation functions
mathematical functions
time and date functions
control functions
miscellaneous functions
cooking on a budget
games
Table Top Role Playing Games (TTRPGs)
Forge of Empires
survival
preparation
immediate threats
calm down
assess situation
plan

pattern for survival
psychology of survival
motivation
tools and equipment
self-defense
first aid
shelter
fire
signal
water
food
music and art
electricity
lighting
Natives, colonization, and genocide
human rights
emergency message

Note that the dictionary follows the language lexicons.

A a

A

ei

letter

ASCII: 41 hex

UNICODE: LATIN CAPITAL LETTER A

keyword: PL/I format item

a

ei

letter

ASCII: 61 hex

UNICODE: LATIN SMALL LETTER A

a

part of speech: article

Oxford English Corpus (OEC) rank: #6

Corpus of Contemporary American English (COCA): #5

Dolch level: Pre-primer

Polysemy: 20

The word “a” is an indefinite article in English. It is used before singular nouns that begin with a consonant sound. Here are some common definitions and uses of the word “a”: [ChatGPT]

1. **Indefinite article:** “A” is used to indicate a non-specific or general item or person. It implies that the noun it modifies is one of many. For example: [ChatGPT]
 - “I saw a car on the street.” [ChatGPT]
 - “She adopted a cat from the shelter.” [ChatGPT]
 - “He is a doctor.” [ChatGPT]
2. **One or any:** “A” can be used to mean “one” or “any” when referring to a single instance or example of something. For example: [ChatGPT]
 - “Give me a pencil.” [ChatGPT]
 - “She wants to buy a house.” [ChatGPT] [Human response: bad example]
 - “He needs a break.” [ChatGPT] [Human response: bad example]
3. **Emphasizing uniqueness:** In certain contexts, “a” can be used to emphasize the uniqueness or rarity of something. For example: [ChatGPT] [Human response: questionable assertion]
 - “She is a gem of a person.” [ChatGPT]
 - “That was a once-in-a-lifetime experience ” [ChatGPT]

Before consonant sounds: “A” is used before singular nouns that begin with a consonant sound, regardless of whether the actual letter is a consonant or a vowel. For example, “a book,” “aa university,” and “a European country.” It’s important to note that the word “a” changes to “an” before singular nouns that begin with a vowel sound. For example, “an apple,” “an hour,” and “an honest person.” [ChatGPT]

A (w)

keyword: PL/I keyword

Format item

a1

programming language

Address 1 code.

Created by Matthew Newhook <matthew@engr.mun.ca> the language was used to test compiler output. It requires gcc 2.4.2 or higher and is portable to computers with memory segment protection.

ftp://ftp.cs.mun.ca/pub/a1

A+

programming language

year created: 1985 by Arthur Whitney at Morgan Stanley.

A plus

From the Wikipedia page on [A+ \(programming language\)](#)

A+ is an array programming language descended from the programming language A, which in turn was created to replace [APL](#) in 1988. Arthur Whitney developed the A portion of A+, while other developers at Morgan Stanley extended it, adding a graphical user interface and other language features. A+ is a high-level, interactive, interpreted language, designed for numerically intensive applications, especially those found in financial applications. A+ runs on many Unix variants, including Linux. It is free and open source software released under a GNU General Public License.



A+ provides an extended set of functions and operators, a graphical user interface with automatic synchronizing of widgets and variables, asynchronous executing of functions associated with variables and events, dynamic loading of user compiled subroutines, and other features. A newer graphical user interface has not yet been ported to all supported platforms.

The A+ language implements the following changes to the APL language:

- an A+ function may have up to nine formal parameters
- A+ code statements are separated by semicolons, so a single statement may be divided into two or more physical lines
- The explicit result of a function or operator is the result of the last statement executed
- A+ implements an object called a dependency, which is a global variable (the dependent variable) and an associated definition that is like a function with no arguments. Values can be explicitly set and referenced in exactly the same ways as for a global variable, but they can also be set through the associated definition.

Interactive A+ development is primarily done in the Xemacs editor, through extensions to the editor. Because A+ code uses the original APL symbols, displaying A+ requires a font with those special characters; a font named kapl is provided on the web site for that purpose.

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A-0 System

programming language

year created: 1951, 1952 by Grace Hopper.

From the Wikipedia page on [A-0 System](#)

A-0 system (*Arithmetic Language version 0*), written by Grace Murray Hopper in 1951 and 1952 for the UNIVAC I, was an early compiler related tool developed for electronic computers. The A-0 functioned more as a loader or linker than the modern notion of a compiler. A program was specified as a sequence of subroutines and its arguments. The subroutines were identified by a numeric code and the arguments to the subroutines were written directly after each subroutine code. The A-0 system converted the specification into machine code that could be fed into the computer a second time to execute the said program.

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Aaru

Aaru, or the Field of Reeds, is the name for heavenly paradise in Egyptian mythology. Ruled over by Asar (Osiris), an Egyptian god, the location has been described as the ka of the Nile Delta.

Name of Portal as Goddess	Guardian God
1 “Mistress Of Trembling”	“Dreadful”

2	"Mistress Of The Sky"	"Born Of The Hindquarters"
3	"Mistress Of The Altar"	"Cleanser"
4	"Powerful Of Knives"	"Long-Horned Bull"
5	"Fiery One"	"Killer Of Opponents"
6	"Mistress Of Darkness"	"Destroyer"
7	"Veiler Of The Weary One (Asar)"	"Ikenti"
8	"Lighter Of Flames & Extinguisher Of Heat"	"Protector Of His Body"
9	"Foremost"	"Fowler"
10	"Piercing Of Voice" or "High Of Double Doors"	"Great Embracer"
11	"Ceaseless In Knifing & Scorching Of Rebels"	"Cook Of His Braziers"
12	"Invoked By Her Two Lands"	"Cat"
13	"She Above Whom Osiris (or: Isis, Ennead) Stretches His Arms"	"Destroyer Of The Robber"
14	"Mistress Of Anger & Dancing On Blood"	"Screecher"
15	"Great Of Valour"	"Vigilant Of Face"
16	"Dread"	"Clever In Bowling"
17	"Great On The Horizon"	"Spirit"
18	"Lover Of Heat"	"Anointed"
19	"She Who Foretells Mornings Throughout Her Lifespan & Possessor Of The Writings of Thoth"	nameless
20	"Dweller Within the Cavern Of Her Lord"	nameless
21	"Sharpener Of Flint To Speak For Her"	"Giraffe" (("Memy"))

See: .aac 🗿 — file extension

aardvark

Aarvarks are digitgrades, meaning they walk on their toes.

A single aardvark can eat 50,000 to 60,000 ants and termites in one night.

Aarvarks are good swimmers.

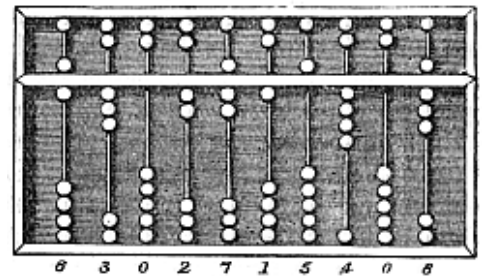
abacus

æb'-ə-kəs (Received Pronunciation, General American)

noun

plural **abaci** or **abacuses**

An instrument for performing calculations, usually a rectangular frame with rows of wires, rods, or grooves along which beads, balls, or pebbles are slid. Each wire or groove designates a denomination, such as units, tens, hundreds, etc (decimal system), and each bead represents a digit or a specific nuber of digits (such as representing five).



etymology: 1387 CE Middle English *abacus* from Latin: sandboard abacus, counting board, from Greek ἄβαξ (*ábax*): board covered with sand for tracing calculations, genitive form ἄβακος (*abakos*), from Phoenician, related to Hebrew אֲבָחָא (*abhaq*), dust

Chinese: 算盤

French: l' abaque

German: der abakus

Russian: счеты

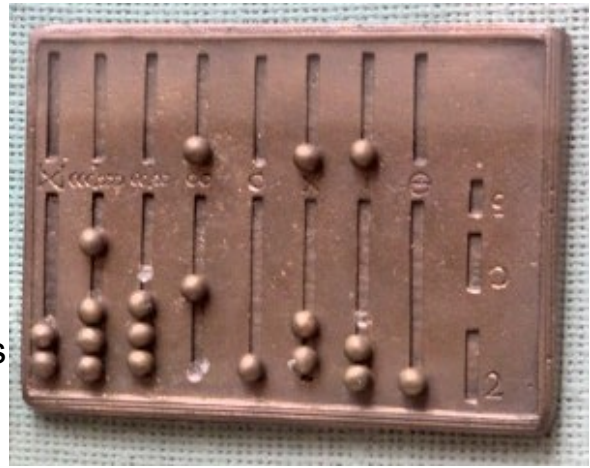
Spanish: ábaco

A user of an abacus is called an *abacist*.

From the Wikipedia page on [Abacus](#)

The **abacus** (plural **abaci** or **abacuses**),

also called a **counting frame**, is a calculating tool which has been used since ancient times. It was used in the ancient Near East, Europe, China, and Russia, centuries before the adoption of the Hindu-Arabic numeral system. The exact origin of the abacus has not yet emerged. It consists of rows of movable beads, or similar objects, strung on a wire. They represent digits. One of the two numbers is set up, and the beads are manipulated to perform an operation such as addition, or even a square or cubic root.



In their earliest designs, the rows of beads could be loose on a flat surface or sliding in grooves. Later the beads were made to slide on rods and built into a frame, allowing faster manipulation. Abacuses are still made, often as a bamboo frame with beads sliding on wires. In the ancient world, particularly before the introduction of positional notation, abacuses were a practical calculating tool. The abacus is still used to teach the fundamentals of mathematics to some children, e.g., in post-Soviet states.

Designs such as the Japanese soroban have been used for practical calculations of up to multi-digit numbers. Any particular abacus design supports multiple methods to perform calculations, including the four basic operations and square and cube roots. Some of these methods work with non-natural numbers (numbers such as 1.5 and $\frac{3}{4}$).

Although calculators and computers are commonly used today instead of abacuses, abacuses remain in everyday use in some countries. Merchants, traders, and clerks in some parts of Eastern Europe, Russia, China, and Africa use abacuses. The abacus remains in common use as a scoring system in non-electronic table games. Others may use an abacus due to visual impairment that prevents the use of a calculator.

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abalone

Abalones attach to rocks and other hard surfaces using their strong muscular foot. An abalone can use its foot to move on a surface. Abalones eat algae and kelp.

ABAP

abbreviation

programming language

From the Wikipedia page on [ABAP](#)

ABAP (Advanced Business Application Programming, originally *Allgemeiner Berichts-Aufbereitungs-Prozessor*, German for “general report preparation processor”) is a high-level programming language created by the German software company SAP SE. It is currently positioned, alongside Java, as the language for programming the SAP NetWeaver Application Server, which is part of the SAP NetWeaver platform for building business applications.

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Abbe condenser

“The Abbe condenser is named for its inventor Ernst Abbe, who developed it in 1870. The Abbe condenser, which was originally designed for Zeiss, is mounted below the stage of the microscope. The condenser concentrates and controls the light that passes through the specimen prior to entering the objective. It has two controls, one which moves the Abbe condenser closer to or further from the stage, and another, the iris diaphragm, which controls the diameter of the beam of light. The controls can be used to optimize brightness, evenness of illumination, and contrast. Abbe condensers are difficult to use for magnifications of above 400X, as the aplanatic cone is only representative of a numerical aperture (NA) of 0.6.” —[Wikipedia](#)

Abbe number

“In optics and lens design, the Abbe number, also known as the V-number or constringence of a transparent material, is an approximate measure of the material’s dispersion (change of refractive index versus wavelength), with high values of V indicating low dispersion.” —[Wikipedia](#)

ABC

abbreviation

programming language

From the Wikipedia page on [ABC \(programming language\)](#)

ABC is an imperative general-purpose programming language and integrated development environment (IDE) developed at Centrum Wiskunde & Informatica (CWI), Netherlands by Leo Geurts, Lambert Meertens, and Steven Pemberton. It is interactive, structured, high-level, and intended to be used instead of BASIC, Pascal, or AWK. It is intended for teaching or prototyping, but not as a systems-programming language.

ABC had a major influence on the design of the language Python, developed by Guido van Rossum, who formerly worked for several years on the ABC system in the mid-1980s.

Features

Its designers claim that ABC programs are typically around a quarter the size of the equivalent Pascal or C programs, and more readable. Key features include:

- Only five basic data types
- No required variable declarations
- Explicit support for top-down programming
- Statement nesting is indicated by indentation, via the off-side rule
- Infinite precision arithmetic, unlimited-sized lists and strings, and other features supporting orthogonality and ease of use by novices

ABC was originally a monolithic implementation, leading to an inability to adapt to new requirements, such as creating a graphical user interface (GUI). ABC could not directly access the underlying file system and operating system.

The full ABC system includes a programming environment with a structure editor (syntax-directed editor), suggestions, static variables (persistent), and multiple workspaces, and is available as an interpreter-compiler. As of 2020, the latest version is 1.05.02, and it is ported to Unix, DOS, Atari, and Apple

MacOS.

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ABC ALGOL

programming language

From the Wikipedia page on [ABC ALGOL](#)

ABC ALGOL is an extension of the programming language ALGOL 60 with arbitrary data structures and user-defined operators, intended for computer algebra (symbolic mathematics). Despite its advances, it was never used as widely as Algol proper.

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ABD(x)

keyword: PL/I keyword

Built-in function

Barkhad Abdi

25 January 2024: “Actor Barkhad Abdi only received \$65,000 for his award-winning supporting role in the film ‘Captain Phillips’. After production, he returned to selling mobile phones in his brother’s shop at a Minneapolis mall.” —[Creepy.Org](#)



25 January 2024: “Barkhad Abdi, who was born in Somalia and had never acted before appearing in “Captain Phillips,” improvised the phrase “look at me, I am the captain now,” ” —[MissFacto](#)

Abel equation

“The Abel equation, named after Niels Henrik Abel, is a type of functional equation of the form $f(h(xI)) - h(x + 1)$ or $\alpha(f(x)) = \alpha(x) + 1$ ” —[Wikipedia](#)

Abel’s inequality

“In mathematics, Abel’s inequality, named after Niels Henrik Abel, supplies a simple bound on the absolute value of the inner product of two vectors in an important special case.” —[Wikipedia](#)

Abel’s summation formula

“In mathematics, Abel’s summation formula, introduced by Niels Henrik Abel, is intensively used in analytic number theory and the study of special functions to compute series.”

—[Wikipedia](#)

Abel’s test

“In mathematics, Abel’s test (also known as Abel’s criterion) is a method of testing for the convergence of an infinite series. The test is named after mathematician Niels Henrik Abel. There are two slightly different versions of Abel's test D one is used with series of real numbers, and the other is used with power series in complex analysis. Abel’s uniform convergence test is a criterion for the uniform convergence of a series of functions dependent on parameters.”

—[Wikipedia](#)

Abel’s theorem

“In mathematics, Abel’s theorem for power series relates a limit of a power series to the sum of its coefficients. It is named after Norwegian mathematician Niels Henrik Abel.” —[Wikipedia](#)

abberation

An aberration is something that deviates from the normal.

abort

ə'-bɔ:t (Received Pronunciation), ə'-bɔ:ɪt (General American)

verb

keyword: Ada reserved key word

The **abort** keyword is used to abort either a task (thread) or partition (process). An `abort_statement` causes one or more tasks to become abnormal, thus preventing any further interaction with such tasks. The completion of the triggering_statement of an `asynchronous_select` causes a `sequence_of_statements` to be aborted. — [Ada Reference Manual 9.8](#)

`abort_statement ::= abort task_name {, task_name};` — [Ada Reference Manual 9.8](#)

abortion

“If the government can keep you from getting an abortion, they can also require it.” —Sandra Day O'Connor

The US Supreme Court has repeatedly upheld the right for judges to order the sterilization of autistic people and others that are deemed to be mentally or physically deficient by the standards of Francis Galton, Andrew Carnegie, and Adolf Hitler.

Forced sterilization is one of the five acts named in the definition of genocide in the international treaty Convention on the Prevention and Punishment of Genocide.

The US Supreme Court has upheld that judges can not be sued for issuing secret sterilization orders without a trial or a chance for the victim or the victim's family to protest or respond, calling literal genocide a judicial duty.

Joe Biden voted to allow states to overturn *Roe v. Wade* and in 1974 said “Women don't have sole right to say what should happen to their bodies.”

“I don't like the Supreme Court decision on abortion. I think it went too far. I don't think a woman has the sole right to say what should happen to her body.” —Joe Biden, 1974

“Despite professing support for the right to have an abortion, the Democratic Party has failed to take the long-term legislative steps that would provide federal protection.” —Cornel West

Jimmy Carter and the Democrats had a supermajority in Congress from 1977-1979 and a majority from 1979-1981. Did not codify *Roe v Wade* into law.

Bill Clinton and the Democrats had a full majority from 1993-1995. Did not codify *Roe v Wade* into law.

Barack Obama and the Democrats had a supermajority for 72 days and a full majority from 2009-2011 plus independents who agreed to vote for the Freedom of Choice Act. Obama campaigned on the promise of codifying *Roe v Wade* “first thing ” after winning the election. Did not codify *Roe v Wade* into law. A few days after being sworn in as president, Obama said it was not his “highest legislative priority.”

Donald Trump in 2016 called for “some form of punishment” for abortion.

During the first two years of Joe Biden's presidency, the Democrats had a full majority of both houses of Congress.

The Democrats passed the bill to codify *Roe* into law in the House of Representatives.

In addition, two Republican senators were co-authors of the bill to codify Roe into law.

Joe Biden put political pressure on Senate Democrats to avoid bringing the bill up for a vote.

In addition to Joe Biden's personal opposition to legalized abortion, the Democrats believe they can use the issue for fund raising to gather far more money than they could gather if they actually followed through on their promise to protect a woman's right to choose.



public domain

Both Bill Clinton and Barack Obama campaigned on codifying Roe into law, Obama promising to make it his first presidential action. Both abandoned the topic after being elected president.

Despite this record of failure, the Democrats have been fund raising for decades on a promise to codify Roe v Wade without ever taking action. It has been the single biggest money making promise.

18 March 2023: "Terrifying this can even be proposed by elected officials. Think about it alongside the Georgia police killing of a climate activist, the Ohio train poisoning, and approval of the Willow oil project in Alaska while the planet burns.

The US is now in a full-blown dystopia.

21 South Carolina GOP lawmakers propose death penalty for women who have abortions.

It's not just a lone extremist: The bill has 21 co-sponsors in the state's House of Representatives." —[Steven Donziger](#)

18 March 2023: "A hospital in northern Idaho intends to stop offering pregnancy care altogether because the laws have criminalized abortion care and physicians are being forced to leave the state." —[Amea Vanderpool](#)



Erin Binnall
Public Information Officer
erin.binnall@bonnergeneral.org

Bonner General Health
Public Information
Erin Binnall, Public Information Officer

PRESS RELEASE 3/17/2023

Discontinuation of Labor & Delivery Services at Bonner General Hospital

Bonner General Health's commitment to patient safety drives our decisions in the available services we can provide to our community, even with the most challenging choices having to be made. Therefore, Bonner General Health's Board of Directors and Senior Leadership team has made the emotional and difficult decision to discontinue providing Obstetrical services at Bonner General Health for the following reasons:

Loss of Pediatrician coverage - Without pediatrician coverage to manage neonatal resuscitations and perinatal care, it is unsafe and unethical to offer routine Labor and Delivery services; despite our best efforts over months of negotiations. Our inpatient pediatric services will no longer be consistent and reliable in May. BGH has reached out to other active and retired providers in the community requesting assistance with pediatric call coverage with no long-term sustainable solutions. Our low patient volume is insufficient to attract candidates for pediatric hospitalists, and we cannot afford to continue having locum tenens physicians.

Volumes and changing demographics – The number of deliveries at BGH has continued to decrease yearly. We delivered 265 babies in 2022 and admitted less than ten pediatric patients for other reasons. There are many reasons, including a nationwide decrease in births, an older population moving to Bonner County, and Kootenai Health having a new, updated unit with Neonatologists and OBs in-house 24/7.

Idaho's legal and political climate - Highly respected, talented physicians are leaving. Recruiting replacements will be extraordinarily difficult. In addition, the Idaho Legislature continues to introduce and pass bills that criminalize physicians for medical care nationally recognized as the standard of care. Consequences for Idaho Physicians providing the standard of care may include civil litigation and criminal prosecution, leading to jail time or fines.

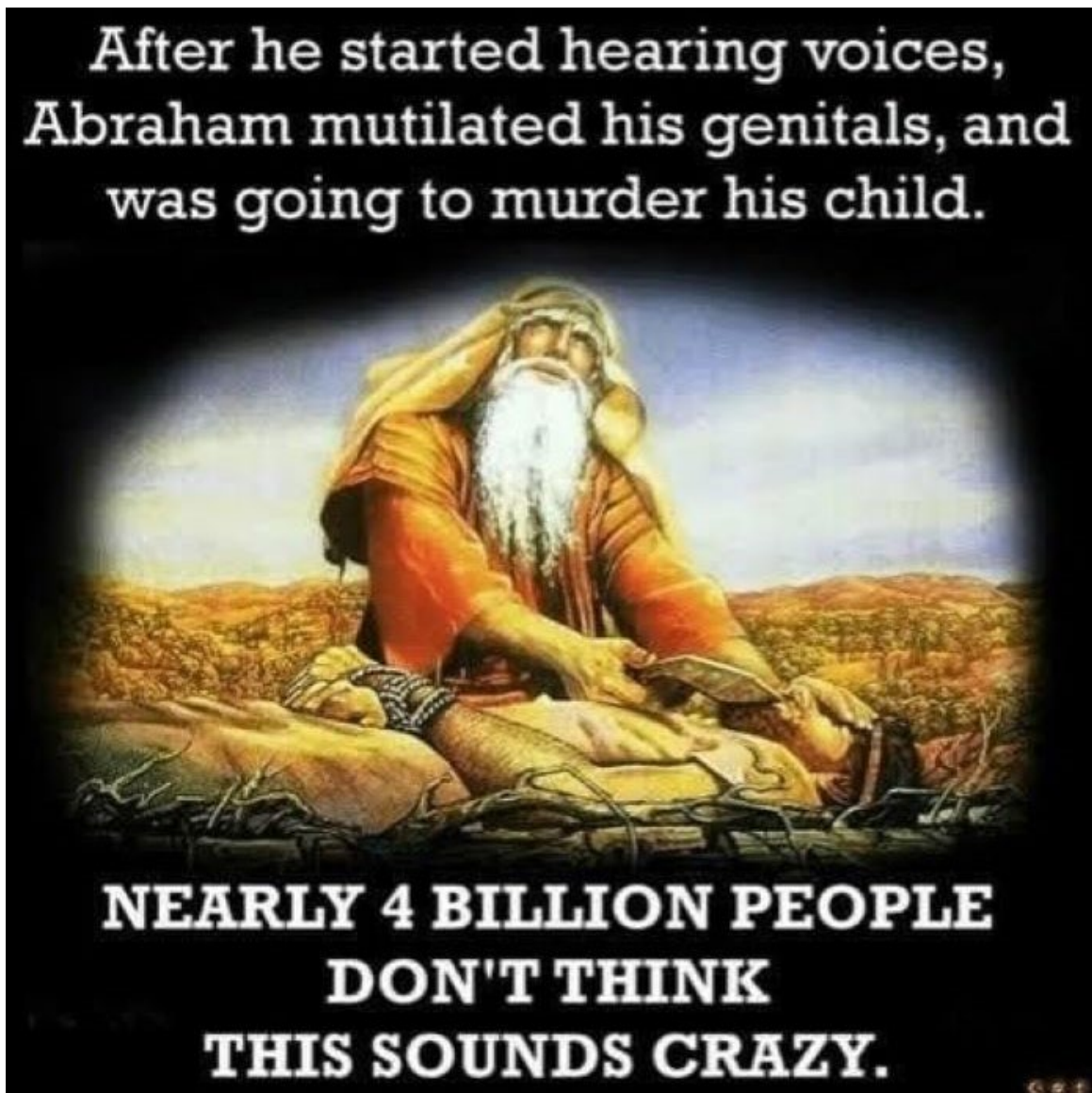
520 N. THIRD AVENUE SANDPOINT, IDAHO 83864-1507 TEL (208) 263-1441
www.bonnergeneral.org

7 August 2023: “When Republicans look at a woman’s uterus they see a factory. When Democrats look at a woman’s uterus they see a cash machine.” —[Chuck](#)

See: .abr  — file extension

Abraham

11 January 2024: “After he started hearing voices, Abraham mutilated his genitals, and was going to murder his child. Nearly 4 billion people don’t think this sounds crazy.” —[The Cookie Savior](#)



Abrams tank

25 September 2023: “US Secretary of Defense Lloyd Austin tells the Russian military to NOT hunt for Abrams tanks:

“The repetition of the situation with German Leopards is unacceptable, when they were hunted, I saw these calls. Play by the rules!” ” —[David Roth-Lindberg](#)

abs

keyword: Ada reserved key word

function: C math.h library function: stands for ABSolute value

keyword: ABS (all caps) BASIC function

keyword: VHDL reserved key word

abscissa

æb'sɪs.ə (US)

noun

plural **abscissas**, also **abscissae**

geometry The horizontal (x-) coordinate of a point in a Cartesian coordinate system obtained by measuring the distance from the vertical (y-axis) parallel to the x-axis. Examples, the coordinate (4,5) has an abscissa of 4.

absolute error

noun

mathematics The absolute (positive) value of the difference between an observed or measured value of a quantity and its true value.

Also called Absolute Accuracy Error.

absolute value

'æb.sə'lut 'væl.ju or **'æb.sə'ljut 'væl.ju** (US)

noun

1 *mathematics* The magnitude of a real number without regard to its sign.

Also called numerical value.

2 *mathematics* The principal square root of the sums of the squares of the real and imaginary parts of a given complex number.

3 *technical* The actual magnitude of a numerical value of measurement, without regard to its relation to other values.

abstract

keyword: Ada reserved key word

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

Abubakari II

“Before Columbus arrived in America in 1492, an African prince from Mali named Abubakari II already sailed the Atlantic Ocean to America in 1311; He got to America 181 years before Columbus.” —[Adémólá](#)

ACA

See: Affordable Care Act

ACAB

2 June 2023 “Happy Pride Month! Over the years, Gay Officers Action League has demonstrated unwavering commitment to promoting universal acceptance and inclusion for all members of the LGBTQIA+ community. Their remarkable contributions to this city and the department defines New York’s Finest.” —[Commissioner Sewell](#)



Look closely and you will notice that the artist placed the phrase “ALL COLORS ARE BEAUTIFUL” or “ACAB” in the logo under “Happy Pride Month”.

ACC

abbreviation

programming language

acceleration

ək.ˌsɛl.ə.ˈɹeɪ.ʃən or æk.ˌsɛl.ə.ˈɹeɪ.ʃən or ɪk.ˌsɛl.ə.ˈɹeɪ.ʃən

noun

physics The rate of change of velocity per unit of time.

Accent

programming language

Rational Synergy

accept

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

access

Access is a word that can be either a noun or a verb.

noun “Ability to make use of any information system (IS) resource.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-32]

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

keyword: VHDL reserved key word

18 March 2023: “Whenever I hear a Dem pol use the word “access” I see a walrus sized plutocrat between us and something we need to survive and I know what they are “defending” is the walrus’s sacred right to bankrupt us for it.” —[mousdrv](#)

18 March 2023: “I REALLY hate when they and their sycophants use the term access. We already have access in that X exists. What we the people don’t have, is actual money to actually pay for X. And when they say access it’s just a meaningless platitude and they’ll never do anything to fix things.” —[asdfJeff/a>](#)

access authority

noun “An entity responsible for monitoring and granting access privileges for other authorized entities.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

access control

noun “The process of granting or denying specific requests: 1) for obtaining and using information and related information processing services; and 2) to enter specific physical facilities (e.g., Federal buildings, military establishments, and border crossing entrances).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: FIPS PUB 201-1 (adapted)]

access control list (ACL)

noun “A list of permissions associated with an object. The list specifies who or what is allowed to access the object and what operations are allowed to be performed on the object.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

access control mechanism

noun “Security safeguards (i.e., hardware and software features, physical controls, operating procedures, management procedures, and various combinations of these) designed to detect and deny unauthorized access and permit authorized access to an information system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

access cross domain solution

noun “A type of cross domain solution (CDS) that provides access to a computing platform, application, or data residing on different security domains from a single device.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 1253F Attachment 3]

access level

noun “A category within a given security classification limiting entry or system connectivity to only authorized persons.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

access list

noun “Roster of individuals authorized admittance to a controlled area.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

access profile

noun “Association of a user with a list of protected objects the user may access.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

access type

noun “Privilege to perform action on an object. Read, write, execute, append, modify, delete, and create are examples of access types.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

accountability

noun

“1. The principle that an individual is entrusted to safeguard and control equipment, keying material, and information and is answerable to proper authority for the loss or misuse of that equipment or information.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NSA/CSS Manual Number 3-16 (COMSEC)]

“2. The security goal that generates the requirement for actions of an entity to be traced uniquely to that entity. This supports non-repudiation, deterrence, fault isolation, intrusion detection and prevention, and after-action recovery and legal action.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-27 Rev A]

accounting legend code (ALC)

noun “A numeric code used to indicate the minimum accounting controls required for items of accountable COMSEC material within the COMSEC material control system (CMCS).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NSA/CSS Manual Number 3-16 (COMSEC)]

accounting number

noun “A number assigned to an individual item of COMSEC material to facilitate its handling and accounting.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NSA/CSS Manual Number 3-16 (COMSEC)]

accuracy

'akjʊ.ɹəsi or 'akjə.ɹəsi (Received Pronunciation), 'ækjə.ɹəsi (General American)

noun

1 The state of being correct or true; freedom from mistake or error; correctness.

2 *mathematics* The degree to which a given quantity is correct and free from error; how close the measured value is to the true (actual) value.

Usage: My father used this example to show the difference between accuracy and precision. One plus one equals a small number is highly accurate, but highly imprecise. One plus one equals 0.99417998 is highly precise, but inaccurate.

accreditation (C.F.D.)

noun “Formal declaration by a designated accrediting authority (DAA) or principal accrediting authority (PAA) that an information system is approved to operate at an acceptable level of risk, based on the implementation of an approved set of technical, managerial, and procedural safeguards.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009,

[US federal government\]](#)

“Rationale: The Risk Management Framework uses a new term to refer to this concept, and it is called authorization.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

See: authorization to operate (ATO)

accreditation boundary (C.F.D.)

noun

“1. Identifies the information resources covered by an accreditation decision, as distinguished from separately accredited information resources that are interconnected or with which information is exchanged via messaging. Synonymous with Security Perimeter.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

“2. For the purposes of identifying the Protection Level for confidentiality of a system to be accredited, the system has a conceptual boundary that extends to all intended users of the system, both directly and indirectly connected, who receive output from the system. See authorization boundary.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

“Rationale: The Risk Management Framework uses a new term to refer to the concept of accreditation, and it is called authorization. Extrapolating, the accreditation boundary would then be referred to as the authorization boundary.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

accreditation package (C.F.D.)

noun “Product comprised of a system security plan (SSP) and a report documenting the basis for the accreditation decision.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

“Rationale: The RMF uses a new term to refer to this concept, and it is called RMF security authorization package.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

accrediting authority (C.F.D.)

noun “Synonymous with designated accrediting authority (DAA). See also authorizing official.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

“Rationale: The Risk Management Framework uses a new term to refer to this concept, and it is called authorizing official (AO).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

Ace DASL

programming language

Distributed Application Specification Language

ache

Ache is a word that can be either a noun or a verb.

acorn

Acorn is the fruit of the oak tree, usually containing one seed, but sometimes two or three. Oak trees start producing acorns around 20 to 50 years old. It takes an acorn six to 24 months to mature, depending on species.

acos

function: C math.h library function: stands for Arc COSine

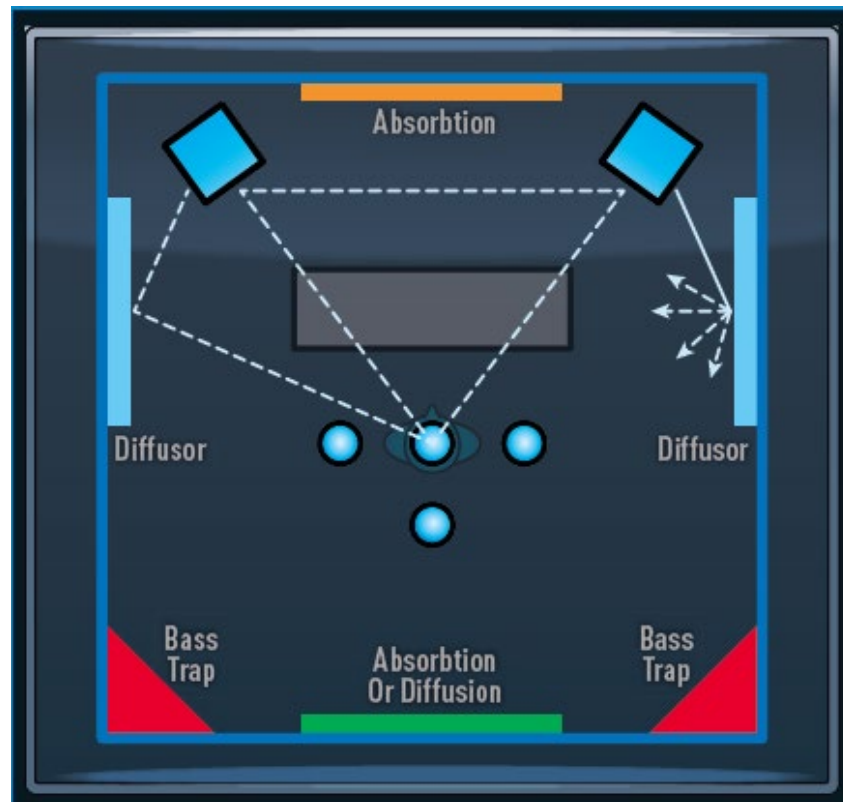
ACOS(x)

keyword: PL/I keyword

Built-in function

acoustics

6 January 2024: “acoustics cheat sheet” — [Solar Heavy](#)



6 january 2024: “Diffusors at first reflection points

Secondly, you will never ever defeat bass treating it like that

Lastly, you will never defeat even high frequencies with 2 absorbers” — [Nathaniel W.](#)

acoustic treatment

10 January 2024: “How acoustic treatment affects the sound?

I had a chance to listen to inexpensive monitors, Kali LP6, in an average untreated bedroom (I mean it wasn't empty with lots of echo, it was just normal), and then in a very expensive proper acoustic environment

In untreated room I achieved very linear frequency response, using measurement microphone and Room EQ Wizard

But in proper treated room, the difference in sound was so drastic that it's impossible to even describe

Sound was so big and physical. It seemed like you can touch the objects with your hand and the soundstage was excellent. The definition and clarity were on another level. Sounded much more close to expensive monitors.

The difference between treated and untreated was I don't know, 10x? It was totally different so hard even to compare.

And I remind you, the frequency response was linear in both cases.

This is another reminder that your room is A PART of your monitoring system. It sounds. It really does.

If your room still has issues, upgrade it, and only then purchase new monitors. Otherwise, money I wouldn't say wasted, but spent with much smaller efficiency.

Acoustic treatment is not that expensive as you might think, if you are not trying to achieve very fancy looks. And especially if you are ready to work with your hands.” —[Nathaniel W.](#)

acquirer

noun “Stakeholder that acquires or procures a product or service.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST IR 7622, ISO/IEC 15288 (adapted)]

acre

'eɪ.kə (Received Pronunciation), **'eɪ.kə** (General American)

noun

A unit of area in the US Customary System, derived from an English unit of land area (symbol: **a.** or **ac.**), originally defined as the area of one chain by one furlong (66 by 660 feet) denoting a day's ploughing for a yoke of oxen, which is exactly equal to 10 square chains or 1/640 of a square mile, now standardized as 4,840 square yards or 4,046.86 square meters.

acs

keyword: ACS (all caps) BASIC function

act

Act is a word that can be either a noun or a verb.

Action!

programming language

ActionScript

programming language

activation data

noun “A pass-phrase, personal identification number (PIN), biometric data, or other mechanisms of equivalent authentication robustness used to protect access to any use of a private key, except for private keys associated with System or Device certificates.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 1300]

active attack

noun “An attack on the authentication protocol where the Attacker transmits data to the Claimant, Credential Service Provider, Verifier, or Relaying Party. Examples of active attacks include man-in-the middle, impersonation, and session hijacking.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-63-2]

active content

noun “Electronic documents that can carry out or trigger actions automatically on a computer platform without the intervention of a user.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-28]

active cyber defense

noun “Synchronized, real-time capability to discover, detect, analyze, and mitigate threats and vulnerabilities.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: DSOC 2011]

activities (assessment)

noun “An assessment object that includes specific protection related pursuits or actions supporting an information system that involve people (e.g., conducting system backup operations, monitoring network traffic).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-53A Rev 1]

Actor

programming language

acute

ə'-kju:t (Received Pronunciation), ə-kyōōt' (General American)

adjective

1. *geometry* An angle numerically smaller than a right angle, as in **acute angle**.
2. *geometry* Of a triangle, having all three interior angles measuring less than 90 degrees each, as in **acute triangle**.

acute angle

noun

mathematics, geometry Any angle measuring greater than zero degrees (0°) and less than ninety degrees (90°).

acute triangle

noun

geometry A triangle in which all three of the internal angles are acute angles (less than 90°).

Also called acute-angled triangles.

A/D

13 January 2024: "Sound engineering glossary

Word: A/D

Abbreviation of Analog-to-Digital Conversion — the conversion of continuous analog signals into numbers (discrete values), in other words, into a digital signal.

Example: happens inside your audio interface when you sing into a microphone (analog signal) but get a digital audio file inside your daw (digital signal).

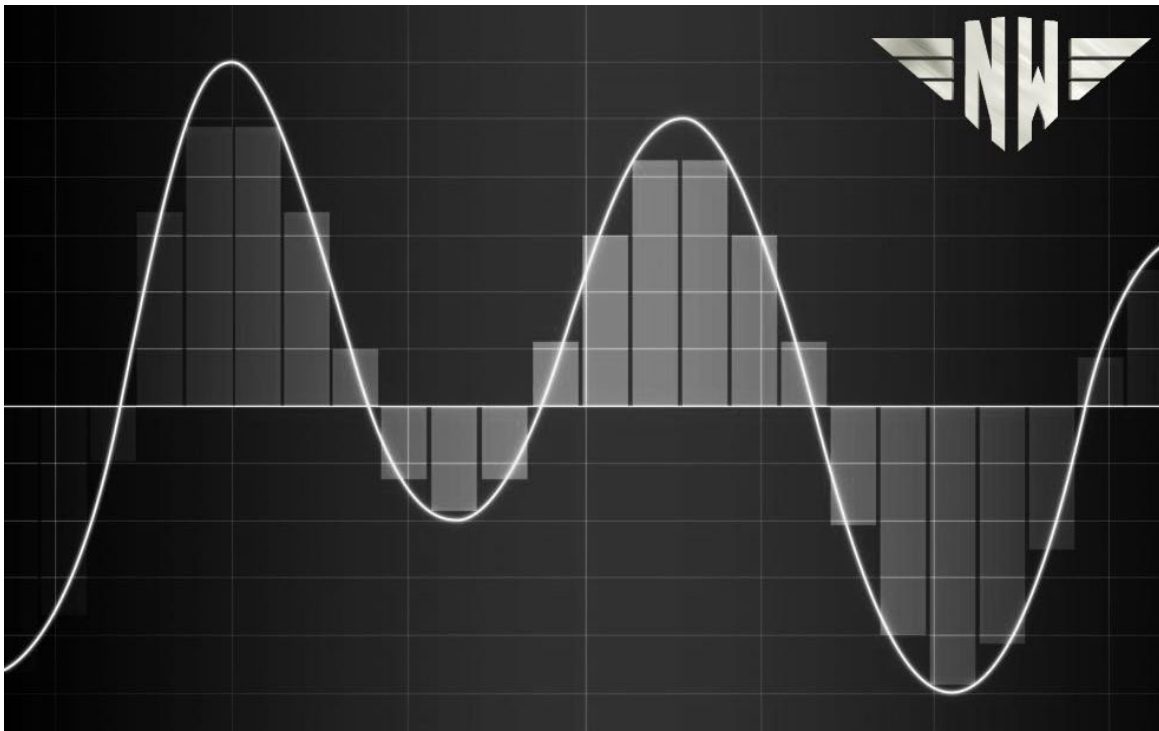
It's the A/D converter that does this, and it's built in your interface. It's also built in your phone, in your Bluetooth headphones with microphone etc.

Anywhere where analog signal needs to be converted to digital.

On the picture:

1. Continuous line - analog signal.
2. Approximate discrete values - its digital representation after A/D conversion." — [Nathaniel](#)

[W.](#)



Ada

programming language

See: [Ada lexicon](#)

John Quincy Adams

John Quincy Adams was from the third largest faction of the only national party that existed at the time.

Samual Adams

“How strangely eill the tools of a tyrant pervert the plain meaning of word.” —Samuel Adams

A/D conversion

29 December 2023: “Did you know?”

Apollo X series desktop interfaces have the same AD/DA converters as their older brothers X6 and X8P

Makes them a great choice in smaller setups where you need professional quality monitoring”

—[Nathaniel W.](#)



add

æd

verb

1 *transitive* To join or unite (e.g. one thing to another, or as several particulars) so as to increase the number, augment the quantity or enlarge the magnitude, or so as to form into one aggregate. [Wiktionary](#)

2 To sum up; to put together mentally; to add up. [Wiktionary](#)

3 *transitive* To combine elements of (something) into one quantity. [Wiktionary](#)

4 *transitive* To give by way of increased possession (to someone); to bestow (on). [Wiktionary](#)

5 *transitive* To append (e.g. a statement); to say further information; to add on. [Wiktionary](#)

6 *intransitive* To make an addition; to augment; to increase; to add on. [Wiktionary](#)

7 *intransitive, mathematics* To perform the arithmetical operation of addition. [Wiktionary](#)

8 *intransitive, video games* To summon minions or reinforcements. [Wiktionary](#)

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle)

ADD(x,y,p[,q]

keyword: PL/I keyword

Built-in function

ADDBUFF (n)

keyword: PL/I keyword

Option of ENVIRONMENT attribute

addend

'æd.ɛnd

noun

1 *mathematics* Any one of two or more numbers or other terms that are to be added together.

2 *organic chemistry* A moiety added to another molecule.

adder

æ'-dɜː, *noun*

In a computing machine, an arithmetic component that performs the addition of positive numbers, usually integers (floating point adders exist). N.B. An arithmetic component that both adds and subtracts is called an **algebraic adder**.

Addid Ababa

“Addis Ababa’s name translates to ‘New Flower’ in Amharic. The city is one of the oldest cities in the world.” —[Typical African](#)

add-on security (C.F.D.)

noun “Incorporation of new or additional hardware, software, or firmware safeguards in an operational information system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

ADDR(x)

keyword: PL/I keyword

Built-in function

address

Address is a word that can be either a noun or a verb.

keyword: COBOL reserved word (z/OS)

Adenine

programming language

Haystack

adequate security

noun “Security commensurate with the risk and the magnitude of harm resulting from the loss, misuse, or unauthorized access to or modification of information.” [from Committee on National

Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; OMB Circular A-130]

ADL

1 September 2023 [official reply to the #BanTheADL hashtag campaign on X (formerly Twitter)]: “ADL is unsurprised yet undeterred that antisemites, white supremacists, conspiracy theorists and other trolls have launched a coordinated attack on our organization. This type of thing is nothing new.

This onslaught comes following our participation in the 60th Anniversary of the March on Washington, where ADL proudly marched shoulder-to-shoulder with African-American leaders and those from other minority communities. It also follows a meeting with the leadership of X, formerly known as Twitter, that clearly upset these hateful groups.”

administrative incident (COMSEC)

noun “A violation of procedures or practices dangerous to security that is not serious enough to jeopardize the integrity of a controlled cryptographic item (CCI), but requires corrective action to ensure the violation does not recur or possibly lead to a reportable COMSEC incident.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 4001 (adapted)]

Advanced & Dungeons Dragons, 1st edition

16 March 2023: “From 1977-1988, D&D’s publisher, TSR, published 18 hardback books for the game called Advanced Dungeons & Dragons (what we now call “1E”).

Want to see all 18 books & learn more about them? See my new video!

Learn where the “core classes” came from (many originated in magazine articles), the differences in the different printings of Deities & Demigods, where iconic monsters debuted, & why the D&D Cartoon has an Acrobat, Barbarian & Cavalier! All that & more!” —[Daddy Rolled a 1](#); video at [Daddy Rolled a 1 on YouTube](#)

advanced encryption standard (AES)

noun “A U.S. Government-approved cryptographic algorithm that can be used to protect electronic data. The AES algorithm is a symmetric block cipher that can encrypt (encipher) and

decrypt (decipher) information.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: FIPS PUB 197 (adapted)]

advanced key processor (AKP)

noun “A cryptographic device that performs all cryptographic functions for a management client node and contains the interfaces to 1) exchange information with a client platform, 2) interact with fill devices, and 3) connect a client platform securely to the primary services node (PRSN).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

advanced persistent threat (APT)

noun “An adversary with sophisticated levels of expertise and significant resources, allowing it through the use of multiple different attack vectors (e.g., cyber, physical, and deception) to generate opportunities to achieve its objectives, which are typically to establish and extend footholds within the information technology infrastructure of organizations for purposes of continually exfiltrating information and/or to undermine or impede critical aspects of a mission, program, or organization, or place itself in a position to do so in the future; moreover, the advanced persistent threat pursues its objectives repeatedly over an extended period of time, adapting to a defender’s efforts to resist it, and with determination to maintain the level of interaction needed to execute its objectives.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-39]

advancing

keyword: COBOL reserved word (z/OS)

adversary

noun “Individual, group, organization, or government that conducts or has the intent to conduct detrimental activities.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-30 Rev 1]

advisory (C.F.D.)

noun “Notification of significant new trends or developments regarding the threat to the information systems of an organization. This notification may include analytical insights into trends, intentions, technologies, or tactics of an adversary targeting information systems.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

“Rationale: General definition of a commonly understood term.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

AdvPL

abbreviation

programming language

a.e.

abbreviation

mathematics: Abbreviation for *almost everywhere*.

See: aerobics

Affordable Care Act

1 December 2023: “What’s the point of the Affordable Care Act?

I have a \$1,000 monthly premium and a \$24,000 deductible and it doesn’t cover much of anything.” —[PaulRobeson](#)

Afghanistan

nation

Invaded by the United States 2001.

after

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

Africa

5 August 2023: “ ‘The French economy cannot survive without Africa’ is total nonsense
Ireland has one of the highest GDP per capita and has no colonies.

The big corporations that are in the hands of the globalists, not France, will not survive.

All resources in Africa are exploited by private companies, owned by French, American and British billionaires and politicians who lead these countries. For example, these companies paid \$11 million to Niger for the uranium, and then charged France (taxpayers' money) \$230 million.

Since most politicians in France have shares in these companies, they use the French military as their private security company. They send the french military to Africa to secure the mines for free, because the state pays for them.

Due to the exploitation, the population in Africa is terribly poor and huge waves of refugees are created towards Europe and even more pressure is created on the backs of the European and French economies.

Exploitation has a terrible negative impact on France, not the other way around.

Now with the cessation of uranium from Niger, private companies will not be able to exploit, but France will continue to pay the same amount, let's say to Australia.

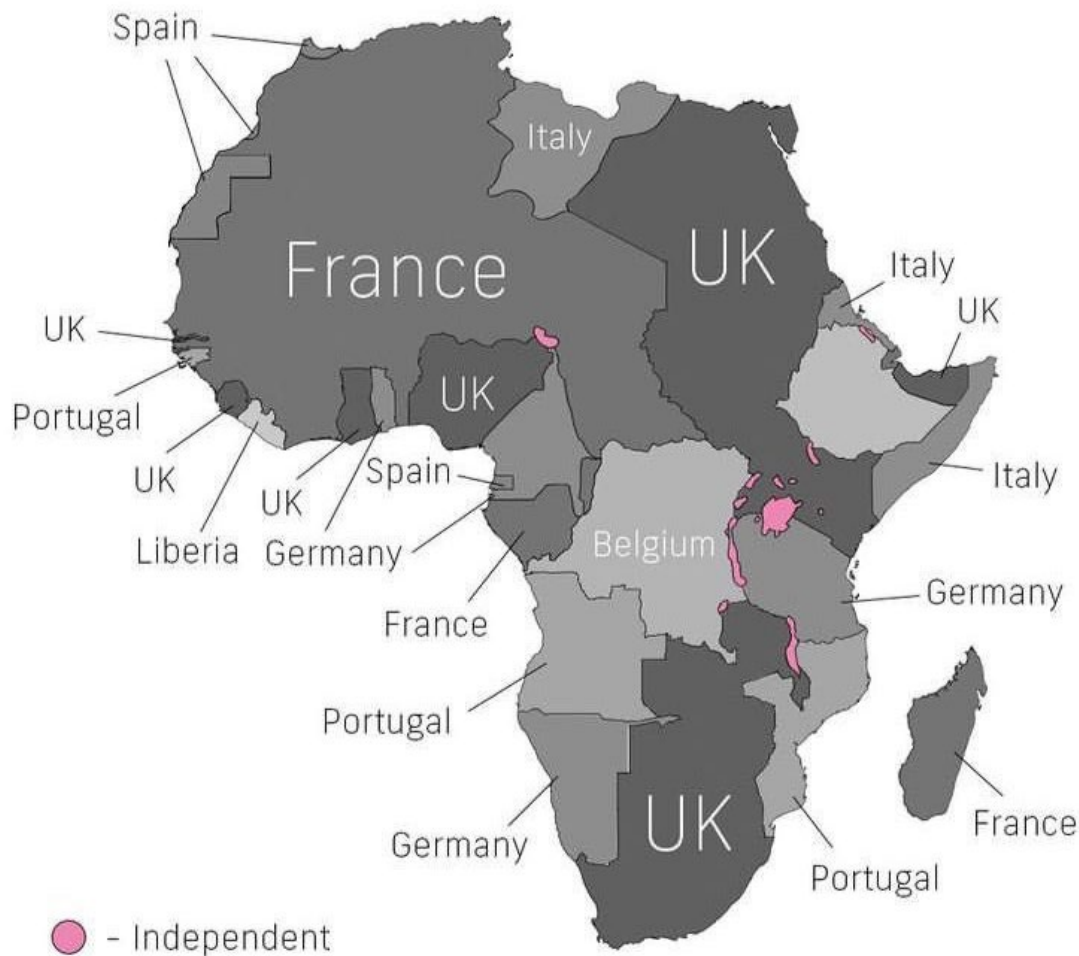
Who is losing here?

Macron, politicians and billionaires, not France.

And the payed and corrupted media as normal.” —[Megatron](#)

5 August 2025: “Unlike France, Belgium, Germany, Italy, Spain, Portugal, and the UK, Russia never participated in the colonization of Africa.” —[sarah](#)

EUROPEAN CONTROL OVER AFRICA 1914



28 August 2023: “The EU is set to launch a new mission in West Africa in the fall, a German newspaper has reported. The combined military-civilian operation will aim to prevent instability triggered by jihadi groups.

European Union member states have agreed to begin a mission in the Gulf of Guinea in West Africa, with police and soldiers deployed to Ghana, Togo, Benin and Ivory Coast, German newspaper *Die Welt am Sonntag* reported on Sunday, citing diplomats.

According to the paper, the mission will aim to train and advise local security forces, help prepare for anti-terror operations, give technical support and implement confidence-building measures in the security sector.

The mission is to be launched after formal approval is given by EU foreign ministers at a meeting in October in Luxembourg.

The reason behind the planned mission is the EU’s concern that Islamist groups “could extend their activities in West Africa from the Sahel zone toward the southern coastal countries on the

Gulf of Guinea, leading to even more widespread instability in the region,” Welt am Sonntag reported.

Militant activity from extremist groups linked to “Islamic State” and al-Qaidahave rocked countries such as Mali, Niger and Burkina Faso in recent years.

The EU also wants to counter Russian influence in the region which has been spread through Wagner mercenaries who have supported military regimes in the Sahel.Ê

The situation was further complicated for the EU after Mali kicked out French and German forces that had been training Malian soldiers and police.

Benin and Ghana had already officially invited the EU to deploy the mission on their territories, according to the paper.

The report comes as several countries in the region have fallen under military governments following coups, the latest being on July 26 in Niger. Military juntas have also taken power in Mali and Burkina Faso.

The fall of Niger to junta control has been especially concerning as it had been a key ally to Western powers operating throughout the region.

KEY TAKEAWAYS:

- They’re deploying “Police and soldiers” on African soil!???
- Mission will be launched after formal approval is given by EU foreign ministers!
- Benin Republic and Ghana had already officially invited the EU to deploy the mission on their territories???

Wait! What??? Okay, if you have followed my reporting long enough, you must have heard me say it over and over again, that AFRICA is the new Ukraine for them. One of the first reports I published over the Niger crisis detailed what you’re now reading in this exclusive report. I made it clear that this is all about the battle between RUSSIA and the west and the fact that RUSSIA has chosen to throw its weight behind Africans in their quest to break lose from colonial enslavement. The battlefield has shifted and if you ever doubted that, there you have it.

The effrontery to send Police and Soldiers to our continent when we are not living in slavery era is enough to help you see what an incredibly historic time we live in, as AFRICANS. It’s a generational TURNING POINT. The west is losing big. Everywhere you turn, they’re losing. Even their own world bank just reported that Russia’s GDP has surpassed that of Europe amidst sanctions! And now they’re also losing AFRICA, which has been their sole provider. It’s fight to finish and God will not forgive any one on the continent who makes it easy for colonizers to continue to entrench themselves on the continent of AFRICA.

Africans! Let’s wake up en masse and be vigilant. This has got to STOP! If we were treated so well, there would be no Russian Wagner on the continent of AFRICA. To beat Africans for generations and tell them not to cry is the height of maniacal arrogance. My confidence is that THIS IS OUR TIME and no force on earth can defeat an IDEA whose time has come. Africans will resist this with everything in them.

Viva Africa!” —[J. C. Okechukwu](#)

29 August 2023“Without African minerals, no phone, no laptop, no automobiles , no diamond, no uranium; no electricity for France. That’s why Africa is unstable; because the west wants to exploit African minerals, and to do so, they must control our politics.” —[Adémólá](#)

30 August 2023: “Even after independence, France still forces 14 of its former colonies to pay colonial taxes for the ‘benefits of colonization’ ” —[Adémólá](#)

30 August 2023: “France took the lives of 1million Algerians during their struggle for independence, in fact, French people were burning everything in Guinea immediately Guineans voted for independence in 1958. There’s no where in Africa that France has taken democracy to.” —[Adémólá](#)

1 Sept 2023: “Nothing exists until a white man says it does. That’s why they tell us Mungo Park discovered river Niger, David Livingstone discovered Victoria Falls, John Speke discovered Lake Victoria. As if Africans weren’t living in these places before they arrived.” —[Adémólá](#)

aftertouch

keyword: MIDI comamnd

A0 hex (where n is the channel number)

2 paraaemters

paramater 1: key

paramater 2: velocity

Agda

programming language

agency

noun “Any executive department, military department, government corporation, government controlled corporation, or other establishment in the executive branch of the government (including the Executive Office of the President), or any independent regulatory agency, but does not include -

- (i) the General Accounting Office;
- (ii) Federal Election Commission;
- (iii) the governments of the District of Columbia and of the territories and possessions of the United States, and their various subdivisions; or
- (iv) Government-owned contractor-operated facilities, including laboratories engaged in

national defense research and production activities.

See also executive agency.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: 44 U.S.C., Sec. 3502]

AgilentVEE

programming language

Keysight VEE

agriculture

Ancient Egypt (Kemet) was famous for its successful **agriculture**, made possible by the great [Nile River](#).

The transition from hunter/gatherer society to agriculture is obscured by the long passage of time and the lack of written records.

Reaping knives (wooden handles and flint blades) from approximately 12,000 years B.P. (before present) have been found in what is now Palestine.

Figs were domesticated approximately 11,400 years B.P. in the Jordan River Valley (see [figs](#) for more information).

Sheep were domesticated in the northern Tigris Valley approximately 11,000 years B.P.

A fertility goddess was worshipped in Çatal Höyük (in Anatolia, what is now present day Turkey) by the middle of the seventh millennium B.C.E. (before the common era, the archaeological equivalent of B.C.).

Summer squash was being grown in Central America by 5500 B.C.E.

AI

“It’s computers. It has nothing to do with music. It can’t destroy a hotel room. It can’t throw a TV off the fifth floor into the pool and get right in the middle. When AI knows how to destroy a hotel room, then I’ll pay attention to it.” —Joe Walsh (The Eagles)

14 July 2023: “The leading developers of AI are military. Smart sentient drones, bombers,

tanks, ground troops etc ought to scare the hell out of you. Psychopaths are designing our extinction” — [Dark Warlord](#)

11 August 2023: “All coding projects have two parts:

1. The fun part: where you get to “create”
2. The pain part: where you have to debug

Code LLMs are ‘automating’ the fun parts while introducing bugs and not helping much with debugging. As a developer, you’re left with more pain to deal with.

This is the main reason why devs, even with moderate experience, are hesitant to use code-gen tools.

Some parts of creation (“fun”) can be painful because of boilerplate code. However, the solution to boilerplates is not LLMs but the right kinds of abstractions and good programming languages.


Figuring that out is actually quite fun for most devs, and they won’t mind spending keyboard time on that.


So if you are selling stuff to developers, similar to any other customer, focusing on what they really want can set your product a mile apart from the competition.


If you think CoT variants help, that’s not true.” — [Delip Rao e/σ](#)

1 September 2023: “In 2014, Ursula Le Guin warned that corporate power wanted to stop us from even imagining freedom.

Nearly a decade later, the tech industry seems intent on using generative AI to do just that by further turning art into commodities. It’s our responsibility to stop them.” — [Paris Marx](#)

See: `.ai`  — file extension

See: `.aif`  — file extension

See: `.aiff`  — file extension

aim

Aim is a word that can be either a noun or a verb.

AI music

27 December 2023: “I’m sorry to say that there are some indie artists I’ve heard recently on some shows and things... that...

...are 100% using AI music generators and lapping up the praise. To anyone with ears, it's obvious.

If this is you... shame on you.

I just feel sorry for the people that can't tell the difference. Because it is totally obvious.”

—[Kiffie](#)

AIMMS

abbreviation

programming language

air (element)

Air is one of the four Western elements (fire, earth, air, water).

aircraft

noun “Any mechanical device intended for, and capable of, transporting individuals through air space” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

air gap

noun “An interface between two systems at which (a) they are not connected physically and (b) any logical connection is not automated (i.e., data is transferred through the interface only manually, under human control).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: IETF RFC 4949 Ver 2]

air gauge knife

noun “A device that appears to be an air gauge with a concealed pointed, metallic shaft used

as a stabbing instrument (Penal Code Section 16140)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

AIX

abbreviation

operating system

Proprietary OS by IBM.

IBM's Advavanced Interactive eXecutive, a System V Unix version. — [Wikipedia: List of operating systems](#)

Akrotiri

nation

Akrotiri

See: alanine

Alaska LNG project

President Joe Biden approved the \$38,000,000,000 Alaska LNG gas project on 14 April 2023.

The project includes 807 miles of pipeline, a gas treatment plant, a liquefaction facility, and an LNG terminal that will process 20,000,000 metric tons of gas per year.

Burning those 20,000,000 metric tons of gas will release 50,000,000 metric tons of carbon dioxide into the atmosphere.

This project alone will by itself raise Alaska's fossil fuel emissions by more than 30%.

There are always gas leaks. The gas leaks of methane are 28-86 times stronger than carbon

dioxide as a greenhouse gas.

The intent is to sell all of the gas produced to Asia.

Biden's project will have a lifetime of decades, at least 30 years.

489 new roads will be built across land previously untouched by human activity, devastating wildlife.



map from [Earth Justice](#)

This and the Willow project is how Joe Biden and the Democrats have kept Biden's campaign promise of no new fossil fuel projects in Alaska. Vote Green.

From the Twitter account on [Climate Defiance](#).

Albania

nation

Albania

See: alcohol

Aldor

programming language

ale

a type of beer with a bitter flavor and higher alcoholic content

Ale is an [alcoholic beverage](#).

nutritional information:

See also Chinese herbalism below for Chinese gender and Chinese flavor.

magickal correspondences and uses:

Western element: [fire](#)

Magickal uses: purification

ritual uses:

Ritual uses: Ale was used for purification.

January 6: Twelfth Night: European holy day. Day to clean up the debris from the Yule Feast.

Wassailing: Pre-Christian Germanic tradition was to wassail, which comes from the Anglo-Saxon phrase *waes hael*, which meant “to be whole” or “to be healthy”. The Anglo-Saxons would toast each other’s health and share drink from a large wooden bowl. The wassail drink was called “lamb’s wool”. The traditional mixture was made by adding spices to hot ale, [beer](#), or mead. In more recent times it has been made from hot apple cider. The traditional spices included: nutmeg, ginger, and cinnamon (especially nutmeg), sweetened with sugar, honey, or sugar-coated crab apples (especially honey). The mixture was served hot and often topped with toasted bread.

wedding reading

Wedding reading from ancient Egypt:

“Let My Love Love Me Best”,
from the Turin Papyrus, in the Ramesside period circa 1100 BCE, Egypt.

Let my love love me best and I shall ordain
Her hands full of lotus blossoms and flowers
Full of buds and perfumes, strong ale
And beer of every brewable kind
Then she'll give me, her love, a day to remember
Make me drink down this day to its last shadow

deities associated with ale:

- [Aset](#) (Kemetic/ancient Egyptian Goddess)
- [Hathor](#) (Kemetic/ancient Egyptian Goddess)
- [Het Heret](#) (Kemetic/ancient Egyptian Goddess)
- [Isis](#) (Kemetic/ancient Egyptian Goddess)
- Kremana (Slavia)
- Shoney (Scotland)
- Tenemit (Kemetic/ancient Egyptian Goddess)

Ale was used in offerings to several ancient deities.

Chinese herbalism:

Chinese gender: strongly [yin](#) (cool)

cautions and contraindications:

Cautions and contraindications: You want to reduce or eliminate [alcohol](#) from your diet. Alcohol is harmful to the [liver](#).

Alef

programming language

Aleppo

Aleppo, Syria, is about 6,300 years old.

14 October 2023: “The Israeli military’s recent offensive on the ancient and historically significant city of Aleppo in Syria represents an egregious transgression against international norms and human heritage. Aleppo, revered as one of the world’s oldest continuously inhabited cities, possesses a rich tapestry of cultural, architectural, and historical significance that transcends national boundaries. The repercussions of such actions are manifold, as this indiscriminate bombing not only exacerbates regional instability but also threatens to obliterate invaluable heritage, diminish cultural diversity, and deepen hostilities in an already volatile region. A more prudent course of action, rooted in diplomacy and respect for international law, should be sought to avert further devastation and promote the preservation of our shared human heritage.” —[Amazon Guy](#)

alert

Alert is a word that can be either a noun or a verb.

keyword: JavaScript windows method

noun “Notification that a specific attack has been directed at an organization’ information systems.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

ALF

abbreviation

programming language

algebraic adder

al'-ge-bra-ic ad'-der, *noun*

In a computing machine, an arithmetic component that performs both addition and subtraction.

Algeria

nation

22 August 2023: “Algeria refuses French overflight for Niger military operation

Algeria has refused a French request to fly over its airspace for a military operation in Niger, state radio Yeni ?afak said late on Monday.

Algeria opposes any foreign military action in Niger and favours diplomacy to restore constitutional order, state radio added.

France has about 1,500 troops in Niger that were stationed there before last month's coup. It is not clear what military operation Algeria was referring to, but France has not said it would intervene militarily to overturn the military takeover.” —[DD Geopolitics](#)

30 August 2023: “France took the lives of 1million Algerians during their struggle for independence, in fact, French people were burning everything in Guinea immediately Guineans voted for independence in 1958. There’s no where in Africa that France has taken democracy to.” —[Adémólá](#)

ALGOL 58

abbreviation

programming language

ALGOL 60

abbreviation

programming language

ALGOL 68

abbreviation

programming language

ALGOL W

abbreviation

programming language

Muhammad Ali

“I don’t trust someone who is nice to me but rude to the waiter, because they would treat me the same way if I were in that position.” —Muhammad Ali

“Hating people because of their color is wrong. And it doesn’t matter which color does the hating. It’s just plain wrong.” —Muhammad Ali

alias

keyword: Ruby reserved word

aliased

keyword: Ada reserved key word

Alice

programming language

Alice ML

AliceBlue

keyword: HTML color name



aliens

15 August 2023: “Aliens & UFOs are just an excuse to expand the military industrial complex into space, so the military can launch surveillance satellites, nukes and advanced weapons into orbit, it’s not about defending the planet from aliens, it’s about using fear to proliferate authoritarianism” —[MC Squared](#)

ALIGNED

keyword: PL/I keyword

Attribute

all

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows method

keyword: PL/C keyword

Diagnostic option of PUT statement as in PUT ALL;

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

ALL(x)

keyword: PL/I keyword

Built-in function

Allen Mall shooter and Elon Musk

Texas police confirm Allen Mall shooter was neo-Nazi

by Jacob Crosse 10 May 2023

In the first press conference held by police officials since Saturday's massacre at the Allen, Texas mall, Dallas Public Safety Regional Director Hank Sibley confirmed on Tuesday that the 33-year-old gunman, Maucio Garcia, had a "neo-Nazi ideation."

The mass shooting left eight people dead, including a three-year-old, eight-year-old and 11-year-old.

Elon Musk doubled down on his claims that there's no evidence the Allen, Texas, mall shooter had white supremacist beliefs, and that @bellingcat "does psy-ops" professionally.

allied nation

noun "A nation allied with the U.S. in a current defense effort and with which the U.S. has certain treaties. For an authoritative list of allied nations, contact the Office of the Assistant Legal Adviser for Treaty Affairs, Office of the Legal Adviser, U.S. Department of State, or see the list of U.S. Collective Defense Arrangements at www.state.gov." [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 4005 (COMSEC)]

alliteration

Repetition of the same consonant, often at the beginning of words.

See: ALLOC — PL/I

See: **ALLOC(x)** — PL/I

ALLOCATE

keyword: PL/I keyword

Abbreviated: ALLOC

Statement

allocation

noun “The process an organization employs to determine whether security controls are defined as system-specific, hybrid, or common.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-37 Rev 1]

noun “The process an organization employs to assign security controls to specific information system components responsible for providing a particular security capability (e.g., router, server, remote sensor).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-37 Rev 1]

ALLOCATON(x)

keyword: PL/I keyword

Abbreviated: ALLOC(x)

Built-in function

all-source infomation

noun “Intelligence products and/or organizations and activities that incorporate all sources of + information, most frequently human resources intelligence, imagery intelligence, measurement and signature intelligence, signals intelligence, and open source data in the production of finished intelligence.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: DoD JP 1-02 (adapted); NIST SP 800-53 Rev 4 (adapted)]

Alma-0

programming language

alphabet

keyword: COBOL reserved word (z/OS)

alphabetic

keyword: COBOL reserved word (z/OS)

alphabetic-lower

keyword: COBOL reserved word (z/OS)

alphabetic-upper

keyword: COBOL reserved word (z/OS)

alphanumeric

keyword: COBOL reserved word (z/OS)

alphanumeric-edited

keyword: COBOL reserved word (z/OS)

also

keyword: COBOL reserved word (z/OS)

alter

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle)

alternate

keyword: COBOL reserved word (z/OS)

alternate COMSEC account manager

noun “The primary alternate COMSEC Account Manager is an individual designated by proper authority to perform the duties of the COMSEC Account Manager during the temporary authorized absence of the COMSEC Account Manager. Additional alternate COMSEC Account Managers may be appointed, as necessary, to assist the COMSEC Account Manager and maintain continuity of operations.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 4005 (COMSEC)]

akternate COMSEC custodian (C.F.D.)

noun “Individual designated by proper authority to perform the duties of the COMSEC custodian during the temporary absence of the COMSEC custodian.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NSA/CSS Manual Number 3-16 (COMSEC)]

A.M.

A.M. is an abbreviation for Ante Meridiem, which means before the Sun has crossed the meridian line (noon).

AmbientTalk

programming language

Amenhotep III

6 December 2023: “Quick visit @EgyptianMuseumC this afternoon to see this new display of Amenhotep III wall paintings from Wadi es Sebua - featuring a beautifully lit statue of his wife, Tiye, check out the details of his cartouches on her crown!” —[Dr Campbell Price](#)









Amiga E

programming language

AmigaOS

operating system

Proprietary OS by Amiga Inc. and Commodore International.

AmigaOS 1.0-3.9 (Motorola 68000) — [Wikipedia: List of operating systems](#)

AmigaOS 4 (PowerPC) — [Wikipedia: List of operating systems](#)

Amiga Unix

operating system

Also called Amix

Proprietary OS by Amiga Inc.

See: amino acids

Amix

abbreviation

operating system

Alternate name for Amiga Unix

Proprietary OS by Amiga Inc.

AMOS

abbreviation

programming language

AMOS BASIC

AMPL

abbreviation

programming language

See: [.amr](#)  — file extension

AMSDOS

abbreviation

operating system

Proprietary OS by Amstrad

Analitik

programming language

analysis approach

noun “The approach used to define the orientation or starting point of the risk assessment, the level of detail in the assessment, and how risks due to similar threat scenarios are treated.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-30 Rev 1]

anchor

keyword: JavaScript windows method

anchors

keyword: JavaScript windows method

and

conjunction: connecting conjunction

part of speech: conjunction

Oxford English Corpus (OEC) rank: #5

Corpus of Contemporary American English (COCA): #3

Dolch level: Pre-primer

Polysemy: 16

keyword: Ada reserved key word

keyword: AND (all caps) BASIC statement

keyword: COBOL reserved word (z/OS)

keyword: PHP reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

The word “and” is a conjunction used to connect words, phrases, clauses, or sentences. It is one of the most common and versatile words in the English language. Here are some common definitions and uses of the word “and”: [ChatGPT]

1. **Conjunction of addition:** “And” is used to add or join two or more similar or related elements. For example: [ChatGPT]
 - “I like to read books and watch movies.” [ChatGPT]
 - “John and Mary went to the park.” [ChatGPT]
 - “The dog is black and white.” [ChatGPT]
2. **Conjunction of alternatives:** “And” can also be used to present alternatives or choices.

For example: [ChatGPT]

- “Would you like tea or coffee?” [ChatGPT] [Note added by human: that is the word “or”, not the word “and”.]
 - “He can choose between staying home and going out.” [ChatGPT]
3. **Conjunction of sequence or continuation:** “And” is used to indicate a sequence of events or a continuation of an action. For example: [ChatGPT]
 - “He woke up, brushed his teeth, and got dressed.” [ChatGPT]
 - “She studied hard, and she passed the exam.” [ChatGPT]
 4. **Conjunction of contrast or opposition:** In some cases, “and” can be used to express a contrast or opposition between two ideas or statements. For example: [ChatGPT]
 - “She is intelligent and humble.” [ChatGPT]
 - “The weather is sunny and cold.” [ChatGPT]
 5. **Conjunction of cause and effect:** “And” can be used to show a cause and effect relationship between two clauses or statements. For example: [ChatGPT]
 - “He studied hard, and he got good grades.” [ChatGPT]
 - “She trained regularly, and she became a skilled athlete.” [ChatGPT]
 6. **Conjunction of agreement or similarity:** “And” can be used to express agreement or similarity between two ideas or statements. For example: [ChatGPT]
 - “I love ice cream, and my sister does too.” [ChatGPT]
 - “The movie was funny, and the audience laughed.” [ChatGPT]
 7. **Conjunction in compound subjects or objects:** “And” is used to join two or more subjects or objects within a sentence. For example: [ChatGPT]
 - “Tom and Jerry are friends.” [ChatGPT]
 - “She bought apples, oranges, and bananas.” [ChatGPT]

It’s important to note that the function of “and” can vary depending on the context and the relationship between the elements it connects. [ChatGPT]

and_bits

keyword: SQL reserved word (z/OS)

Andorra

nation

Andorra

Android

operating system

Proprietary OS by Google

Android is an operating system for mobile devices. It consists of Android Runtime (userland) with Linux (kernel), with its Linux kernel modified to add drivers for mobile device hardware and to remove unused Vanilla Linux drivers. —[Wikipedia: List of operating systems](#)

A.NET

abbreviation

programming language

A#/A sharp

AngelScript

programming language

Angola

nation

Angola

Anguilla

nation

Anguilla

See: .ani 🌈 — file extension

Anker Clock

11 January 2024: “The beautiful and unique Ankeruhr (Anker Clock) overlooks the oldest square in Vienna, the Hoher Markt (Upper Market). The clock - built between 1911 and 1917 in the Jugendstil (Art Nouveau) style - forms a bridge between two buildings and is adorned with mosaic ornaments. Over the course of 12 hours, 12 historical figures or pairs of figures move across the bridge. Every day at noon, all of the figures parade to the accompaniment of music.”
—CIA World Factbook (material that expires after 30 days)



Anpu

Anpu is an Egyptian deity.

The Greek name for Anpu is Anubis.

“Head of the God Anubis

This mask head of Anubis was worn by the priest, who was responsible for the embalming,

during the process of mummification. The ears of Anubis are always erect to show the thoughtful attitude of the jackal, as the protector god of the necropolis.

In some versions of ancient Egyptian religious beliefs Anubis assisted in the mummification and rebirth of the god Osiris. This responsibility for mummification and eventual rebirth is the same role Anubis fulfills for the human dead.

New Kingdom, 19th Dynasty, ca. 1292-1189 BC.” —[NTR of Pharaoh Khonshu Heru](#)



answer

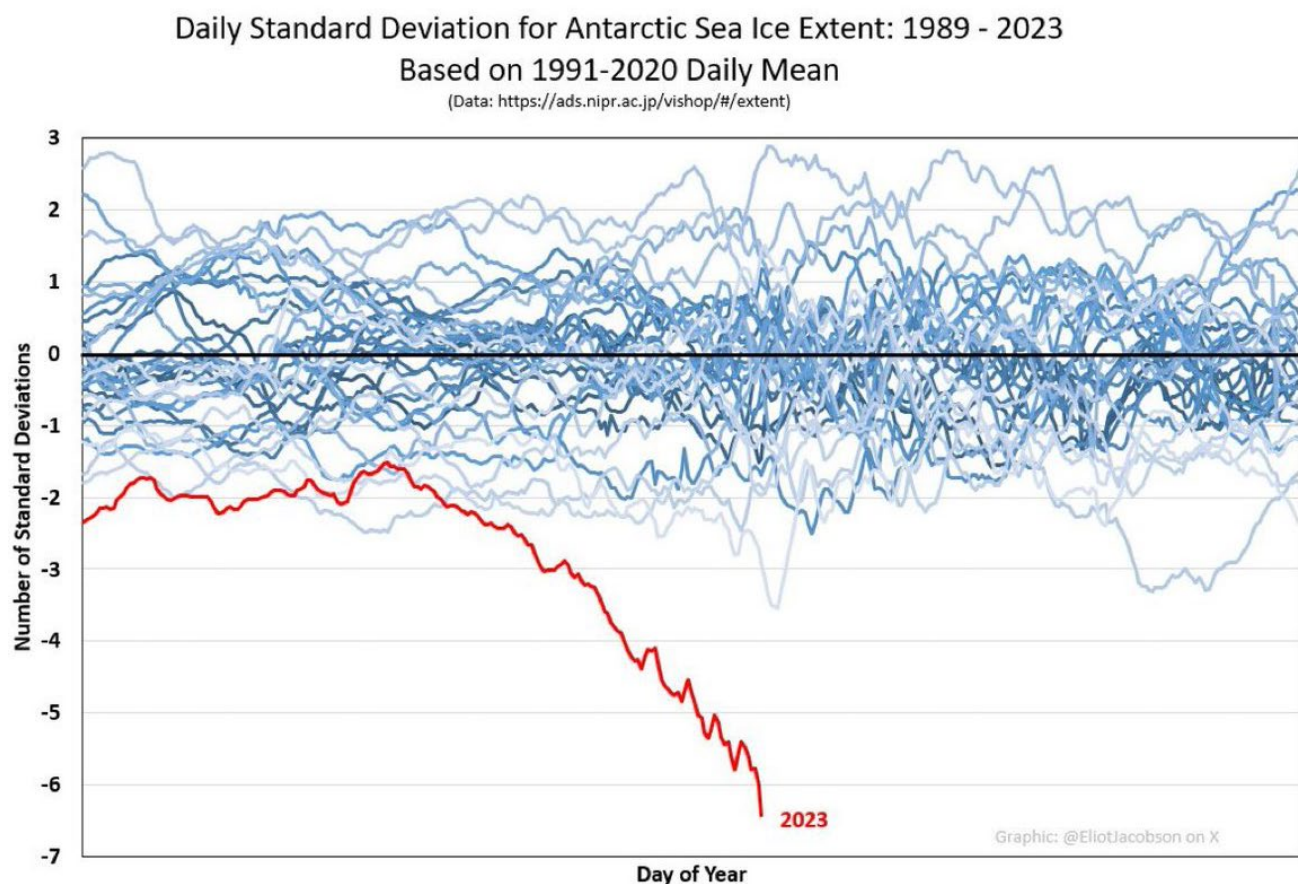
Answer is a word that can be either a noun or a verb.

Antarctic Sea Ice Extent

24 July 2023: “Not to be alarmist but...this is what’s called a six-sigma event, now unfolding in Antarctica.

Otherwise known as a once-in-a-one-billion-year event.

Hang onto your hats.” —[John Gibbons](#)



Susan B. Anthony

“I distrust those people who know so well what God wants them to do because I notice it always coincides with their own desires.” —Susan B. Anthony

Antigua and Barbuda

nation

Antigua and Barbuda

anti-jam

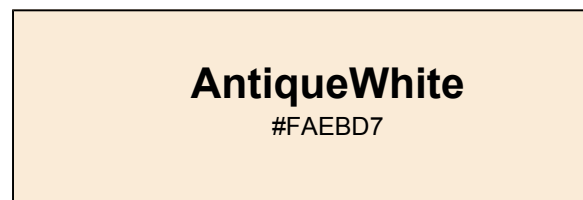
noun “The result of measures to resist attempts to interfere with communications reception.”

[from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government;

Source: CNSSI No. 1200]

AntiqueWhite

keyword: HTML color name



anti-signal fingerprint

noun “anti-signal fingerprint Result of measures used to resist attempts to uniquely identify a particular transmitter based on its signal parameters.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 1200]

anti-signal spoof

noun “anti-signal spoof Result of measures used to resist attempts to achieve imitative or manipulative communications deception based on signal parameters.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 1200]

anti-spoof

noun “anti-spoof Countermeasures taken to prevent the unauthorized use of legitimate identification & authentication (I&A) data, however it was obtained, to mimic a subject different from the attacker. ” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

anti-tamper (AT)

noun “Systems engineering activities intended to deter and/or delay exploitation of critical technologies in a U.S. defense system in order to impede countermeasure development, unintended technology transfer, or alteration of a system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: DoDI 5200.39]

See: tampering

any

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle)

ANY(x)

keyword: PL/I keyword

Built-in function

AOS

abbreviation

operating system

Proprietary OS by Data General.

For 16-bit Data General Eclipse computers. — [Wikipedia: List of operating systems](#)

AOS/VS

abbreviation


operating system

Proprietary OS by Data General.

For 32-bit Data General (MV series) Eclipses. — [Wikipedia: List of operating systems](#)

Apache Pig Latin

programming language

See: .ape  — file extension

Apex

abbreviation

programming language

Salesforce.com, Inc

APL

abbreviation

programming language

append

keyword: APPEND (all caps) BASIC command

App Inventor

programming language

App Inventro for Android's visual block language

MIT App Inventor

apple

U.S. apples are banned in the European Union because they are treated with diphenylamine (DPA), which has been linked to cancer.

apple

The crabapple is the only apple native to North America. [University of Illinois](#) [University of Illinois](#)

Apples come in all shades of reds, greens, and yellows. [University of Illinois](#)

Two pounds of apples make one 9-inch pie. [University of Illinois](#)

2,500 varieties of apples are grown in the United States. [University of Illinois](#)

7,500 varieties of apples are grown throughout the world. [University of Illinois](#)

100 varieties of apples are grown commercially in the United States. [University of Illinois](#)

Apples are grown commercially in 36 states. [University of Illinois](#)

Apples are grown in all 50 states. [University of Illinois](#)

Apples are fat, sodium, and cholesterol free. [University of Illinois](#)

A medium apple is about 80 calories. [University of Illinois](#)

The pilgrims planted the first United States apple trees in the Massachusetts Bay Colony.

[University of Illinois](#)

The science of apple growing is called pomology. [University of Illinois](#)

Apple trees take four to five years to produce their first fruit. [University of Illinois](#)

Most apples are still picked by hand in the fall. [University of Illinois](#)

Apple varieties range in size from a little larger than a cherry to as large as a grapefruit. [University of Illinois](#)

Apples are propagated by two methods: grafting or budding. [University of Illinois](#)

The apple tree originated in an area between the Caspian and the Black Sea. [University of Illinois](#)

Apples were the favorite fruit of ancient Greeks and Romans. [University of Illinois](#)

Apples are a member of the rose family. [University of Illinois](#)

Apples harvested from an average tree can fill 20 boxes that weigh 42 pounds each. [University of Illinois](#)

The largest apple picked weighed three pounds. [University of Illinois](#)

Europeans eat about 46 pounds of apples annually. [University of Illinois](#)

The average size of a United States orchard is 50 acres. [University of Illinois](#)

Many growers use dwarf apple trees. [University of Illinois](#)

Charred apples have been found in prehistoric dwellings in Switzerland. [University of Illinois](#)

Most apple blossoms are pink when they open but gradually fade to white. [University of Illinois](#)

Some apple trees will grow over 40 feet high and live over 100 years. [University of Illinois](#)

Most apples can be grown farther north than most other fruits, because they blossom late in spring, minimizing frost damage. [University of Illinois](#)

It takes the energy from 50 leaves to produce one apple. [University of Illinois](#)

Apples are the second most valuable fruit grown in the United States. Oranges are first. [University of Illinois](#)

In colonial time, apples were called winter banana or melt-in-the-mouth. [University of Illinois](#)

The largest U. S. apple crop was 277.3 million cartons in 1998. [University of Illinois](#)

Apples have five seed pockets or carpels. Each pocket contains seeds. The number of seeds per carpel is determined by the vigor and health of the plant. Different varieties of apples will

have different number of seeds. [University of Illinois](#)

World's top apple producers are China, United States, Turkey, Poland, and Italy. [University of Illinois](#)

The Lady or Api apple is one of the oldest varieties in existence. [University of Illinois](#)

Newton Pippin apples were the first apples exported from America in 1768, some were sent to Benjamin Franklin in London. [University of Illinois](#)

In 1730, the first apple nursery was opened in Flushing, New York. [University of Illinois](#)

One of George Washington's hobbies was pruning his apple trees. [University of Illinois](#)

America's longest-lived apple tree was reportedly planted in 1647 by Peter Stuyvesant in his Manhattan orchard and was still bearing fruit when a derailed train struck it in 1866. [University of Illinois](#)

Apples ripen six to ten times faster at room temperature than if they were refrigerated. [University of Illinois](#)

A peck of apples weight 10.5 pounds. [University of Illinois](#)

A bushel of apples weights about 42 pounds and will yield 20-24 quarts of applesauce. [University of Illinois](#)

Archeologists have found evidence that humans have been enjoying apples since at least 6500 B.C. [University of Illinois](#)

The world's largest apple peel was created by Kathy Wafler Madison on October 16, 1976, in Rochester, NY. It was 172 feet, 4 inches long. (She was 16 years old at the time and grew up to be a sales manager for an apple tree nursery.) [University of Illinois](#)

It takes about 36 apples to create one gallon of apple cider. [University of Illinois](#)

Apples account for 50 percent of the world's deciduous fruit tree production. [University of Illinois](#)

The old saying, "An apple a day, keeps the doctor away." This saying comes from an old English adage, "To eat an apple before going to bed, will make the doctor beg his bread." [University of Illinois](#)

Don't peel your apple. Two-thirds of the fiber and lots of antioxidants are found in the peel. Antioxidants help to reduce damage to cells, which can trigger some diseases. [University of Illinois](#)

In 2005, United States consumers ate an average of 46.1 pounds of fresh apples and processed apple products. That's a lot of applesauce! [University of Illinois](#)

Sixty-three percent of the 2005 U.S. apple crop was eaten as fresh fruit. [University of Illinois](#)

In 2005, 36 percent of apples were processed into apple products; 18.6 percent of this is for juice and cider, two percent was dried, 2.5 percent was frozen, 12.2 percent was canned and 0.7 percent was fresh slices. Other uses were the making of baby food, apple butter or jelly and vinegar. [University of Illinois](#)

The top apple producing states are Washington, New York, Michigan, Pennsylvania, California and Virginia. [University of Illinois](#)

In 2006, 58% of apples produced in the United States were produced in Washington, 11% in New York, 8% in Michigan, 5% in Pennsylvania, 4% in California and 2% in Virginia. [University of Illinois](#)

In 2005, there were 7,500 apple growers with orchards covering 379,000 acres. [University of Illinois](#)

In 1998-90 the U.S. per capita fresh apple consumption was around 21 pounds. [University of Illinois](#)

In 2005, the average United States consumer ate an estimated 16.9 pounds of fresh market apples [University of Illinois](#)

Total apple production in the United States in 2005 was 234.9 million cartons valued at \$1.9 billion. [University of Illinois](#)

In 2006/2007 the People's Republic of China led the world in commercial apple production with 24,480,000 metric tons followed by the United States with 4,460,544 metric tons. [University of Illinois](#)

In 2006/2007 commercial world production of apples was at 44,119,244 metric tons. [University of Illinois](#)

Almost one out of every four apples harvested in the United States is exported. [University of Illinois](#)

35.7 million bushels of fresh market apples in 2005 were exported. That was 24 percent of the total U.S. fresh-market crop. [University of Illinois](#)

The apple variety 'Red Delicious' is the most widely grown in the United States with 62 million bushels harvested in 2005. [University of Illinois](#)

Many apples after harvesting and cleaning have commercial grade wax applied. Waxes are made from natural ingredients. [University of Illinois](#)

National Apple Month is the only national, generic apple promotion conducted in the United

States. Originally founded in 1904 as National Apple Week, it was expanded in 1996 to a three-month promotional window from September through November. [University of Illinois](#)

On August 21, 2007 the GoldRush apple was designated as the official Illinois' state fruit. GoldRush is a sweet-tart yellow apple with a long shelf life. The apple is also the state fruit of Minnesota, New York, Vermont, Washington and West Virginia. [University of Illinois](#)

See: apple cider vinegar

Apple DOS

operating system

Proprietary OS by Apple for the Apple II family

Apple Lisa

operating system

Proprietary OS by Apple for the Apple Lisa

Apple Macintosh

operating system

Proprietary OS by Apple for the Apple Macintosh.

Variants include Classic Mac OS, A/UX, Copland, MkLinux, Pink, Rhapsody, Mac OS X, OS X, macOS, Mac OS X Server, OS X Server, and macOS Server.

Apple Network Server

operating system

Proprietary OS: Apple customized version of IBM AIX.

AIX

Apple Pascal

operating system

Proprietary OS by Apple for the Apple II family

AppleScript

programming language

Apple SOS

operating system

Proprietary OS by Apple for the Apple III

application

noun “A software program hosted by an information system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-37 Rev 1]

application-specific integrated circuits (ASICs)

noun “Custom-designed and/or custom-manufactured integrated circuits.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSD No. 505]

apply

keyword: COBOL reserved word (z/OS)

approval to operate (ATO) (C.F.D.)

noun “The official management decision issued by a designated accrediting authority (DAA) or principal accrediting authority (PAA) to authorize operation of an information system and to explicitly accept the residual risk to agency operations (including mission, functions, image, or reputation), agency assets, or individuals. See authorization to operate (ATO).

Rationale: Term has been replaced by the term “authorization to operate (ATO)”.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

apothem

ap'-o-them, *noun*

The perpendicular distance from the center of a regular polygon to a side.

Synonym short radius

a priori argument

The A Priori Argument (also, Rationalization; Dogmatism, Proof Texting.): A corrupt argument from logos, starting with a given, pre-set belief, dogma, doctrine, scripture verse, “fact” or conclusion and then searching for any reasonable or reasonable-sounding argument to rationalize, defend or justify it. Certain ideologues and religious fundamentalists are proud to use this fallacy as their primary method of “reasoning” and some are even honest enough to say so. E.g., since we know there is no such thing as “evolution,” a prime duty of believers is to look for ways to explain away growing evidence, such as is found in DNA, that might suggest otherwise. See also the Argument from Ignorance. The opposite of this fallacy is the Taboo.

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See: logical fallacies

APT

abbreviation

programming language

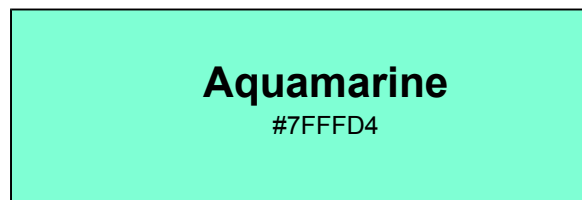
Aqua

keyword: HTML color name



Aquamarine

keyword: HTML color name



Arbil

Arbil, Kurdistan, is about 4,300 years old.

arbitrage

“Arbitrage is the simultaneous purchase and sale of an asset in different markets to exploit tiny differences in their prices. Arbitrage trades are made in stocks, commodities, and currencies. Arbitrage takes advantage of the inevitable inefficiencies in markets.” —[Investopedia](#)

Arby's sourdough breakfast bread, croissant, and French toast sticks

Arby's sourdough breakfast bread, croissant, and French toast sticks are banned in the European Union, India, and the U.K. because they contain Azodicarbonamide (ACA), a carcinogen.

Arc

programming language

ARC Assembly

programming language

year created: 1947

created by: Kathleen Booth

predecessors: ENIAC coding system

Archimedes' Constant

Also known as pi.

See: π pi

architecture

keyword: VHDL reserved key word

See: Arch of Hadrian

arctic fox

21 December 2023: “While the Arctic fox is the only mammal native to Iceland, its range also extends to Alaska, Canada, Greenland, and Russia. Though this hardy animal lives in some of the most-frigid areas on earth, it will usually not start shivering until the temperature drops to -70 °C (-94 °F). The Arctic fox’s coat provides some of the best insulation of any mammal fur, and it is the only member of the canine family with footpads covered in fur.” —CIA World Factbook (material that expires after 30 days)



are

keyword: COBOL reserved word (z/OS)

area

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows object

AREA

keyword: PL/I keyword

Condition

AREA[(size)]

keyword: PL/I keyword

Attribute

areas

keyword: COBOL reserved word (z/OS)

ARexx

abbreviation

programming language

See: .arf — file extension

Argentina

nation

8 September 2023: “Argentina’s far-right “libertarian” candidate Javier Milei clearly calls, in his platform, for many authoritarian state policies:

- “militarization of the institutions during the transition period”
- building for-profit “public-private” prisons
- making it much easier to imprison people
- mandating forced labor for prisoners

- reducing the age of being considered a minor
 - creating a nationwide surveillance network of cameras with facial recognition technology
- Milei's political program is Pinochet's. He is a fascist." — [Ben Norton](#)

Por todo lo expuesto desde La libertad avanza proponemos para encausar lo que a seguridad de refiere los puntos que a continuación detallamos.

- 1- Construcción de establecimientos penitenciarios (alcaldías y cárceles) por sistema de gestión público-privada.
- 2- Militarización de los institutos durante el período de transición a fin de recomponer el sistema, particularmente en lo a que hace a su personal.
- 3- Reformulación de la legislación penitenciaria eliminando los salarios de los reclusos. La recepción de remuneración durante la estadía carcelaria podrá estar solamente relacionada a la participación en trabajos organizados en la cárcel, tendrán la obligación de realizar trabajos y/o estudios dentro de los institutos penales a fin de sostenerse económicamente y capacitarse para su reinserción social.
- 4- Estudiar la factibilidad de reducir la edad de imputabilidad de los menores.
- 5- Agilizar los procesos penales que tanto demoran en la justicia.
- 6- Impulsar el tratamiento de proyectos en las cámaras para eliminar de la legislación penal clausulas garantistas.
- 7- Saneamiento de todas las fuerzas de seguridad, haciendo eje en la lucha contra la corrupción.
- 8- Coadyuvar para que las fuerzas de seguridad vuelvan a tener autoridad profesional y moral, capacitando y equipando a las mismas con las herramientas necesarias para cumplir exitosamente con su tarea.
- 9- Dar especial atención a la lucha contra el narcotráfico, atacando cada una de las células y organizaciones delictivas, controlando límites provinciales y espacio aéreo con radares y personal calificado, dotando a su personal



del conocimiento, herramientas de trabajo, de protección junto con el manejo y aplicación de las nuevas tecnologías.

- 10- Crear a nivel nacional una base de datos de personas con pedido de captura, vinculada a cámaras de seguridad con identificación de rostro, y promover su réplica en todas las provincias del territorio argentino.
- 11- Crear una base de datos de vehículos con impedimento para circular vinculada a cámaras de seguridad con lector de dominios de vehículos (patentes) y promover su ampliación a las provincias

(patentes) y promover su ampliación a las provincias.

12-Reformular el sistema de seguridad interior.

13-Promover la coordinación y cooperación entre las fuerzas federales y provinciales de seguridad para desarticular redes de delitos complejos.

14-Invertir en tecnología para todas las fuerzas de seguridad.

16 September 2023: “Argentina’s extreme-right presidential candidate Javier Milei pledges to abolish the ministries of education, health, science & tech, transportation, etc.

He wants to build private prisons, militarize everything, break ties with China, adopt the US dollar” —[Ben Norton](#) [includes video]

15 December 2023: “BREAKING President Javier Milei announces a total crackdown on Argentine civil society, calling on armed forces to break strikes, arrest protestors, “protect” children from families that bring them to demos, and form a new national registry of all agitating organisations.” —[David Adler](#)



COMUNICADO DE PRENSA

SIN LIBERTAD NO HAY ORDEN Y SIN ORDEN NO HAY PROGRESO

Ciudad de Buenos Aires, 14 de diciembre de 2023.- Presentamos el protocolo para garantizar el orden público frente a los cortes, piquetes y bloqueos que impiden a los argentinos vivir en paz.

Por instrucción del presidente de la nación y con la firme convicción de hacer cumplir la ley a rajatabla y de cuidar a quienes nos cuidan, resolvemos lo siguiente:

1. Que las 4 fuerzas federales intervendrán frente a cortes, piquetes o bloqueos, ya sean parciales o totales. La ley no se cumple a medias: se cumple o no se cumple.
2. Las fuerzas podrán intervenir sin orden judicial, como lo determina el artículo 194 del Código Penal para los delitos en flagrancia.
3. No se tomará en cuenta que hayan vías alternativas al tránsito o la circulación. Si se corta la vía principal, se libera la vía principal.
4. Se actuará hasta dejar totalmente liberado el espacio de circulación.
5. Para llevar a cabo estas medidas, las fuerzas emplearán la mínima fuerza necesaria y suficiente y será graduada en proporción a la resistencia.
6. Serán identificados los autores, cómplices e instigadores de este tipo de delito.
7. También se identificarán a los vehículos utilizados para registrar una infracción administrativa y/o penal.
8. Los datos de los autores, cómplices, partícipes, instigadores y organizadores serán remitidos a las autoridades de aplicación correspondientes.
9. También se dará aviso al juez competente en caso de daño ambiental. Por ejemplo: la quema de cubiertas.
10. En el caso de participación de niños y adolescentes se dará aviso a la autoridad competente de la protección de los mismos y se procederá a sancionar a aquellos que lleven niños a los piquetes.
11. Los costos vinculados a los operativos de seguridad serán cubiertos por las organizaciones o individuos responsables. En caso de tratarse de extranjeros con residencia provisoria, se mandará la información a la Dirección Nacional de Migraciones.
12. Se creará un registro de las organizaciones que participan en este tipo de hechos.

El que las hace, las paga.

Ministerio de Seguridad de la Nación Argentina

30 December 2023: “Our geopolitical alignment is with the United States and Israel. We are not going to ally with communists.” —Javier Milei, President of Argentina quoted by [DD Geopolitics](#)

See: arginine

ARGn

keyword: PL/I keyword

Option of NOMAP, NOMAPIN, and NOMAPOUT options of the OPTIONS attribute

arguments

keyword: JavaScript reserved word

Argus

programming language

Arizona

26 August 2023: “Wanna vote Green in #Arizona in 2024? Please print and sign our ballot access petition.

If you are a registered voter in Arizona, you can download it here:

https://azgp.org/ballot_access

#GoGreen for the greater good” — [Green Party Ballot Access](#); website: [Arizona Green Party](#)



31 August 2023: “#Arizona is half-way to meeting their ballot access petition goal of 60k signatures.

If we work together, we can help them reach their goal by mid-October.” — [Green Party Ballot Access](#)



See: .arj — file extension

Arkadiko Bridge

“A 3,300-year-old chariot bridge is still in use today. The Arkadiko Bridge was built between 1,300 and 1,190 BCE, making it one of the oldest still-used arch bridges still in existence even though it’s not suggested to drive on. It was built on a road that linked Tiryns to Epidauros, and was part of a larger military road system.” —[Historic Vids](#)



arm

arm, *noun*

A side of an angle, as in **arms of an angle**.

Armenia

nation

Armenia

army

The US Costitution authorized a standing navy, but limited an army to two years appriations because many of the writers feared a permanent standing army.

“Oppressors can tyrannize only when they achieve a standing army, an enslaved pres, and a disarmed populace.” —James Madison

AROS Research Operating System

operating system

Proprietary OS by Commodore International.

A/ROSE

abbreviation

operating system

Proprietary embedded operating system by Apple.

arrangment

28 August 2023: “arrangement cheat sheet” —[Solar Heavy](#)



28 August 2023: “I always end my songs with a peter griffin laugh, octave down, reversed, with a chorus and a vocoder effect.” —[Kalin Corvidae](#)

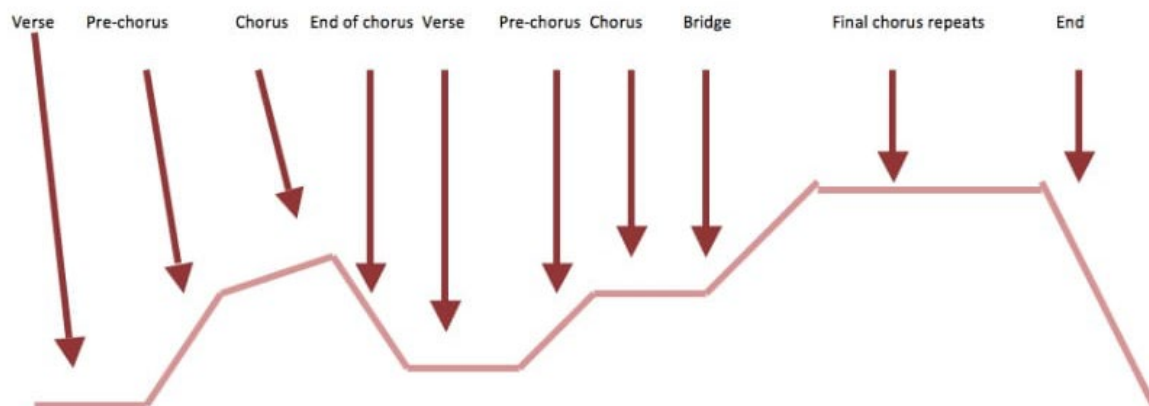
28 August 2023: “fade out the best” —[JamesButcher](#)

28 August 2023: “That way if you ever play it live you have an excuse to loop it until people stop singing it and scream at you to play the next song” —[Searchiedog](#)

28 August 2023: “I make my beats end as it’s about to overstayed its welcome.” —[Audio Bellum](#)

28 August 2023: “also you can’t forget the ubiquitous authentic cadence” —[Searchiedog](#)

30 September 2023: “arrangement cheat sheet” —[Solar Heavy](#)



6 October 2023: “arrangement cheat sheet” — [Solar Heavy](#)



6 October 2023: “Favorites are, Fade out, tape stop, Abrupt” — [Earthquake: The Beat Scientist](#)

6 October 2023: “using the hook with reverb wash out is golden” — [Solar Heavy](#)

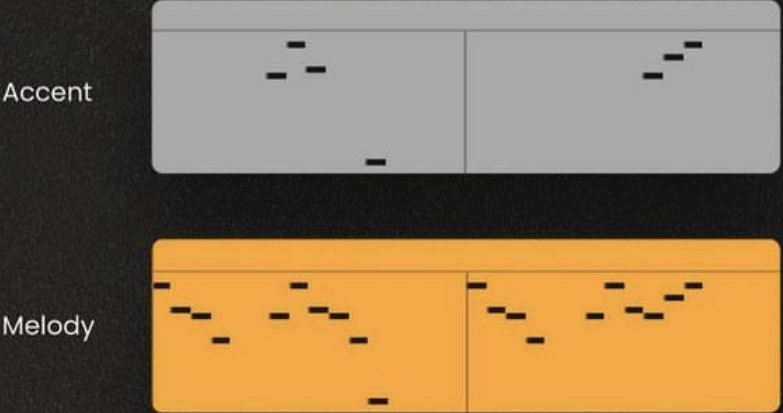
14 November 2023: “theory cheat sheet” — [Solar Heavy](#)

Melody Accent

Add details, excitement & interest

Make your track more dynamic and exciting by adding accents on some important notes.

All you need to do is copy the notes that could emotionally impact the listener and play them with a new sound on top of the main melody.



The diagram consists of two horizontal panels. The top panel, labeled 'Accent' on the left, shows a grey rectangular area divided into two sections. Each section contains a few black horizontal lines of varying lengths, representing notes. The bottom panel, labeled 'Melody' on the left, shows an orange rectangular area divided into two sections. Each section contains a series of black horizontal lines of varying lengths, representing a full melody. The lines in the 'Melody' panel are more numerous and varied in length than those in the 'Accent' panel.

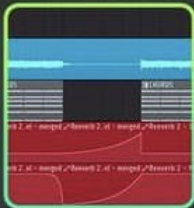
13 December 2023: “arrangement cheat sheet” — [Solar Heavy](#)

DAILY PRODUCER TIPS & TRICKS

1/2

MAKE YOUR DROPS MORE INTERESTING

1. REVERB AUTOMATION



Automate the reverb level of your leads, chords, synths... between empty sections of the drop.

THIS FILLS IN THE GAPS & GIVES A SMOOTH REVERB TRANSITION.

2. ADVANCED FILTERING



Instead of using the classic HP & LP filters, try to use different filters (like morph & harmonic filters).

THESE FILTERS CAN MAKE TRANSITIONS MORE UNIQUE & INTERESTING SOUNDING.

3. RENDER TO AUDIO



Consolidate/freeze your tracks into audio and chop them up, change the length of each chop.

THIS ADDS VARIATION IN RHYTHM OF YOUR SOUNDS.

4. ADD GLIDING NOTES



Use mono legato mode on your synths, leads... with a porta time between 60 - 250 ms.

THIS GIVES OVERLAPPING NOTES A GLIDING EFFECT.

5. PITCH AUTOMATION



Add a pitch automation to your samples, leads... on the start or towards the end of the note.

THIS ADDS EXTRA EAR CANDY TO YOUR SOUNDS.

6. VIBRATO AUTOMATION



Add a vibrato LFO to your leads, synths and automate the rate in the drop. Increase the vibrato on longer notes.

THIS MAKES YOUR SOUND MORE INTERESTING.

14 December 2023: “arrangement cjheat sheet” — [Solar Heavy](#)



array

keyword: Ada reserved key word

keyword: JavaScript object

keyword: PL/C keyword

Diagnostic option of PUT statement as in `PUT ARRAY;`

keyword: VHDL reserved key word

array()

keyword: PHP reserved word (this is a reserved word and not a function)

arrest

Arrest is a word that can be either a noun or a verb.

Arthur

operating system

Proprietary OS by Acorn Computers

artichoke

Artichokes are generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

artificial intelligence

22 November 2023: “The Pentagon is moving toward letting AI weapons autonomously decide to kill humans

The US is among countries arguing against new laws to regulate AI-controlled killer drones. The US, China, and others are developing so-called “killer robots.”

Critics are concerned about the development of machines that can decide to take human lives.

The deployment of AI-controlled drones that can make autonomous decisions about whether to kill human targets is moving closer to reality, *The New York Times* reported.

Lethal autonomous weapons, that can select targets using AI, are being developed by countries including the US, China, and Israel.

The use of the so-called “killer robots” would mark a disturbing development, say critics, handing life and death battlefield decisions to machines with no human input.

Several governments are lobbying the UN for a binding resolution restricting the use of AI killer drones, but the US is among a group of nations — which also includes Russia, Australia,

and Israel — who are resisting any such move, favoring a non-binding resolution instead, *The Times* reported.

“This is really one of the most significant inflection points for humanity,” Alexander Kmentt, Austria’s chief negotiator on the issue, told *The Times*. “What’s the role of human beings in the use of force — it’s an absolutely fundamental security issue, a legal issue and an ethical issue.”

The Pentagon is working toward deploying swarms of thousands of AI-enabled drones, according to a notice published earlier this year.

In a speech in August, US Deputy Secretary of Defense, Kathleen Hicks, said technology like AI-controlled drone swarms would enable the US to offset China’s People’s Liberation Army’s (PLA) numerical advantage in weapons and people.

“We’ll counter the PLA’s mass with mass of our own, but ours will be harder to plan for, harder to hit, harder to beat,” she said, reported Reuters.

Frank Kendall, the Air Force secretary, told *The Times* that AI drones will need to have the capability to make lethal decisions while under human supervision.

“Individual decisions versus not doing individual decisions is the difference between winning and losing — and you’re not going to lose,” he said.

“I don’t think people we would be up against would do that, and it would give them a huge advantage if we put that limitation on ourselves.”

The New Scientist reported in October that AI-controlled drones have already been deployed on the battlefield by Ukraine in its fight against the Russian invasion, though it’s unclear if any have taken action resulting in human casualties.” —[Business Insider](#)

18 March 2023: “Deepfakes, Synthetic Media: How Digital Propaganda Undermines Trust” —[Patrick C Miller](#); article: [Darkreading](#)

19 March 2023: “With the ongoing worldwide catastrophes, and the urgency to adequately and efficiently respond to natural disasters and the effects of wars, AI can become a powerful tool in assisting the humanitarian process” —[Marita Kassis](#); article: [Liberum](#)

See: [.arw](#) — file extension

ARX

abbreviation

operating system

Proprietary OS by Acorn Computers

as

keyword: PHP reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

Asar

Asar is an Egyptian God.

asc

keyword: ASC (all caps) BASIC function

keyword: SQL reserved word (ANSI, Oracle, z/OS)

ascending

keyword: COBOL reserved word (z/OS)

ASCII


keyword: PL/I keyword

Option of Environment attribute

Aset

Aset is an Egyptian Goddess.

The Greek name for Aset is Isis.

See: `.asf`  — file extension

See: `.asm` — file extension

asin

function: C math.h library function: stands for Arc Sine

ASIN(x)

keyword: PL/I keyword

Built-in function

See: `ASM` — PL/I

See: asparagine

asparagus

Asparagus is generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

See: aspartic acid

Julian Assange

10 August 2023: “Hey liberals - torturing a journalist in solitary confinement while trying to extradict him to the United States to put him in prison for life because he told the truth IS fucking fascism.” — [Professor Anthony Zenkus](#)

ASSEMBLER

keyword: PL/I keyword

Abbreviated: ASM

Option of OPTIONS attribute/option

assembly

noun “An item forming a portion of an equipment, that can be provisioned and replaced as an entity and which normally incorporates replaceable parts and groups of parts.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: DoD 4140.1-R; CNSSI No. 4033]

Assembly language

programming language

ASM

assert

keyword: Java reserved key word

keyword: VHDL reserved key word

assessment

noun “See security control assessment or risk assessment.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-30 Rev 1]

See: security control assessment

See: risk assessment

assessment approach

noun “assessment approach The approach used to assess risk and its contributing risk factors, including quantitatively, qualitatively, or semi-quantitatively.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-30 Rev 1]

assessment findings

noun “assessment findings Assessment results produced by the application of an assessment procedure to a security control or control enhancement to achieve an assessment objective; the execution of a determination statement within an assessment procedure by an assessor that results in either a satisfied or other than satisfied condition.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-53A Rev 1]

assessment method

noun “One of three types of actions (i.e., examine, interview, test) taken by assessors in obtaining evidence during an assessment.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-53A Rev 1]

assessment object

noun “The item (i.e., specifications, mechanisms, activities, individuals) upon which an assessment method is applied during an assessment.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-53A Rev 1]

assessment objective

noun “A set of determination statements that expresses the desired outcome for the assessment of a security control or control enhancement.” [from Committee on National Security Systems

(CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-53A Rev 1]

assessment procedure

noun “A set of assessment objectives and an associated set of assessment methods and assessment objects.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-53A Rev 1]

assessor

noun “See security control assessor or risk assessor.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-30 Rev 1]

See: security control assessor

See: risk assessor

asset

noun “A major application, general support system, high impact program, physical plant, mission critical system, personnel, equipment, or a logically related group of systems.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

asset reporting format

noun “A format for expressing the transport format of information about assets and the relationships between assets and reports.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-126 Rev 2]

assign

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows method

ASSOCIATE

keyword: PL/I keyword

Option of ENVIROMENT attribute

assonance

Repetition of the same vowel, often at the beginning of words.

assurance

noun “he grounds for confidence that the set of intended security controls in an information system are effective in their application.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-27 Rev A (adapted)]

assurance case

noun “A structured set of arguments and a body of evidence showing that an information system satisfies specific claims with respect to a given quality attribute.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-39; NIST SP 800-53 Rev 4]

assured information sharing

noun “The ability to confidently share information with those who need it, when and where they need it, as determined by operational need and an acceptable level of security risk.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

assured software

noun “Computer application that has been designed, developed, analyzed and tested using processes, tools, and techniques that establish a level of confidence in it.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]


asteroid belt

The asteroid belt is between Mars and Jupiter. Its width is one AU, approximately the same distance as the Earth is from the Sun. The objects in the asteroid belt are spread far apart, unlike the typical depiction in science fantasy.

astroid

æ'-st.roid, *noun*

The hypocycloid of four cusps.

See: **.asx**  — file extension

asymetric cryptography

See: **public key cryptography**

asymetric key

noun “Two related keys, a public key and a private key that are used to perform complementary operations, such as encryption and decryption or signature generation ” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: FIPS PUB 201-1; NIST IR 7298 Rev 2]

at

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

atan

function: C math.h library function: stands for Arc TANGent

ATAN(x[,y]

keyword: PL/I keyword

Built-in function

ATAND(x[,y])

keyword: PL/I keyword

Built-in function

atan2

function: C math.h library function: stands for Arc TANGent of 2 numbers (first number divided by the second)

ATANH(x)

keyword: PL/I keyword

Built-in function

Atari DOS

operating system

Proprietary OS by Atari for 8-bit computers.

Atari MultiTOS

operating system

Proprietary OS by Atari.

Atari TOS

operating system

Proprietary OS by Atari.

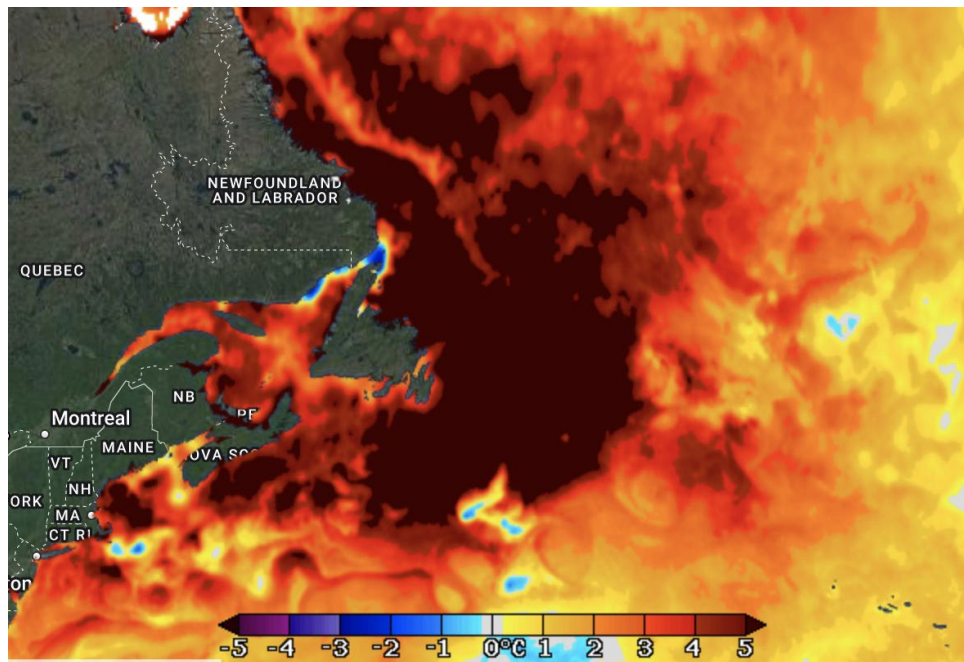
Athens

Athens, Greece, is about 3,400 years old.

Atlantic Ocean

25 July 2023: “An extraordinary marine heatwave has developed off the east coast of Canada, with hundreds of thousands of square miles of ocean experiencing sea surface temperatures more than 5°C (9°F) above normal and max anomalies approaching 10°C (18°F) above normal.

Thermal stress from this marine heatwave could have major impacts on marine life in the Northwest Atlantic.” —[Colin McCarthy](#)



atof

function: C math.h library function: stands for Ascii TO Float

atoi

function: C math.h library function: stands for Ascii TO Integer

atol

function: C math.h library function: stands for Ascii TO Long

atomic

keyword: Objective-C word

attack

Attack is a word that can be either a noun or a verb.

noun “Any kind of malicious activity that attempts to collect, disrupt, deny, degrade, or destroy information system resources or the information itself.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

See: ATTN — PL/I

attack sensing and warning (AS&W)

noun “Detection, correlation, identification, and characterization of intentional unauthorized activity with notification to decision makers so that an appropriate response can be developed.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

attack signature

noun “A specific sequence of events indicative of an unauthorized access attempt.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-12]

attack tree

noun “A branching, hierarchical data structure that represents a set of potential approaches to achieving an event in which system security is penetrated or compromised in a specified way.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: IETF RFC 4949 Ver 2]

attended

verb “Under continuous positive control of personnel authorized for access or use.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: CNSSI No. 4005 (COMSEC); NSA/CSS Manual Number 3-16 (COMSEC)]

ATTENTION

keyword: PL/I keyword

Abbreviated: ATTN

Condition

attribute

keyword: VHDL reserved key word

noun “An attribute is any distinctive feature, characteristic, or property of an object that can be identified or isolated quantitatively or qualitatively by either human or automated means.”

[from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: ISO/IEC 27000]

attribute-based access control (ABAC)

noun “Access control based on attributes associated with and about subjects, objects, targets, initiators, resources, or the environment. An access control rule set defines the combination of attributes under which an access may take place.

See also identity, credential, and access management (ICAM).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

attribute-based authorization

noun “A structured process that determines when a user is authorized to access information, systems, or services based on attributes of the user and of the information, system, or service.”

[from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

auction

Auction is a word that can be either a noun or a verb.

audio interface

20 September 2023: “gear cheat sheet” — [Solar Heavy](#)



audio library

20 March 2023: “Audio library D Some sounds are just too cool not to share” — [Stan Stewart](#);
Library at [Muz4Now](#)

audio mastering

27 November 2023: “Audio Mastering is a flow state

See: [mastering](#)

audit

keyword: SQL reserved word (Oracle)

noun “Independent review and examination of records and activities to assess the adequacy of system controls and ensure compliance with established policies and operational procedures.”

[from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

28 July 2023: “The Democrat-led Senate was ok with passing a bill to hire 87,000 new IRS agents to audit the American people.

It was also ok with passing a bill that targets people who make \$600 online.

But it refused to pass a bill that audits billions of taxpayer dollars sent to Ukraine.” —[Ryan Knight](#)

28 July 2023: “The IRS audits the poor at 5 times the rate of everyone else yet Democrats convinced their easily duped voters that funding 87,000 new IRS agents would mean that they would go after the rich when the data clearly shows that the IRS is more likely to target the poor.” —[Ryan Knight](#)

audit log

noun “A chronological record of system activities. Includes records of system accesses and operations performed in a given period.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

audit record

noun “An individual entry in an audit log related to an audited event.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4]

audit reduction tools

noun “Preprocessors designed to reduce the volume of audit records to facilitate manual review. Before a security review, these tools can remove many audit records known to have little security significance.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-12]

audit trail

noun “1. A chronological record that reconstructs and examines the sequence of activities surrounding or leading to a specific operation, procedure, or event in a security relevant transaction from inception to final result.

2. A record showing who has accessed an information technology (IT) system and what operations the user has performed during a given period.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-47]

Marcus Aurelius

“The object of life is not to be on the side of the majority, but to escape finding oneself in the ranks of the insane.” —Marcus Aurelius

Australia

Australia is wider than the Moon. The Moon has a diameter of 3,400 km and Australia is almost 4,000 km wide.

15 August 2023: “US Cements ‘Game-Changing’ Military Ties Between Japan and Australia
A new military pact between #Japan and #Australia came into effect on Sunday that allows the two countries to deploy troops to each other’s territory” —[Antiwar.com](#): Article at [US Cements ‘Game-Changing’ Military Ties Between Japan and Australia](#)

authenticate

verb “To confirm the identity of an entity when that identity is presented.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-32]

authentication

noun “1. Verifying the identity of a user, process, or device, often as a prerequisite to allowing access to resources in an information system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; FIPS PUB 200; NIST SP 800-27 Rev A]

“2. A security measure designed to protect a communications system against acceptance of fraudulent transmission or simulation by establishing the validity of a transmission, message, originator, or a means of verifying an individual’s eligibility to receive specific categories of information.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSI No. 4005 (COMSEC); NSA/CSS Manual Number 3-16 (COMSEC)]

authentication mechanism

noun “Hardware or software-based mechanisms that force users to prove their identity before accessing data on a device.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-72]

authentication period

noun “The period between any initial authentication process and subsequent re-authentication processes during a single terminal session or during the period data is being accessed.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

authentication protocol

noun “1. A well specified message exchange process between a claimant and a verifier that enables the verifier to confirm the claimant’s identity.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-63-2]

noun “2. A defined sequence of messages between a Claimant and a Verifier that demonstrates that the Claimant has possession and control of a valid token to establish his/her identity, and optionally, demonstrates to the Claimant that he or she is communicating with the

intended Verifier.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-63-2]

authenticator

noun “The means used to confirm the identity of a user, process, or device (e.g., user password or token).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4]

authenticity

noun “the property of being genuine and being able to be verified and trusted; confidence in the validity of a transmission, a message, or message originator. See authentication.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4; NIST SP 800-53A Rev 1; NIST SP 800-39]

author

keyword: COBOL reserved word (z/OS)

authority (C.F.D.)

noun “Person(s) or established bodies with rights and responsibilities to exert control in an administrative sphere.

Rationale: General definition of a commonly understood term. authorization Access privileges granted to a user, program, or process or the act of granting those privileges.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

authorization

noun “Access privileges granted to a user, program, or process or the act of granting those privileges.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal

government; NIST SP 800-53 Rev 4; NIST SP 800-37 Rev 1]

authorization boundary

noun “All components of an information system to be authorized for operation by an authorizing official and excludes separately authorized systems, to which the information system is connected.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4; NIST SP 800-53A Rev 1; NIST SP 800-37 Rev 1]

authorization package

See: security authorization package

authorization to operate (ATO)

noun “The official management decision given by a senior organizational official to authorize operation of an information system and to explicitly accept the risk to organizational operations (including mission, functions, image, or reputation), organizational assets, individuals, other organizations, and the Nation based on the implementation of an agreed-upon set of security controls.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government, source: NIST SP 800-53 Rev 4; NIST SP 800-53A Rev 1; NIST SP 800-37 Rev 1]

authorize processing

See: authorization

authorized ID

noun “The key management entity (KME) authorized to order against a traditional short title.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSI No. 4005 (COMSEC)]

authorized user

noun “Any appropriately cleared individual with a requirement to access an information system (IS) for performing or assisting in a lawful government purpose.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; DoDD 8570.01 (adapted)]

authorized vendor

noun “Manufacturer of information security (INFOSEC) equipment authorized to produce quantities in excess of contractual requirements for direct sale to eligible buyers. Eligible buyers are typically U.S. Government organizations or U.S. Government contractors. ” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NSA/CSS Manual Number 3-16 (COMSEC)]

authorizing official

noun “A senior (federal) official or executive with the authority to formally assume responsibility for operating an information system at an acceptable level of risk to organizational operations (including mission, functions, image, or reputation), organizational assets, individuals, other organizations, and the Nation.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-37 Rev 1; NIST SP 800-53 Rev 4]

authorizing official designated representative

noun “An organizational official acting on behalf of an authorizing official in carrying out and coordinating the required activities associated with security authorization.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-37 Rev 1; DoDI 8510]

autism

“Two boys diagnosed with Autism Spectrum Disorder (ASD) endured mistreatment at a mental institution in Lebanon in 1982. While references to autism can be found in earlier psychological records, ASD was formally recognized by German scientist Hans Asperger during

World War II. Asperger Syndrome, the term previously used to diagnose individuals with ASD, is no longer employed in the United States since 2013, although it remains in use in the United Kingdom. Nonetheless, individuals who received an Asperger Syndrome diagnosis prior to 2013 may still identify with this label.

ASD manifests differently in each individual, encompassing challenges in social interaction, sensory sensitivities, maintaining eye contact, engaging in repetitive behaviors, developing intense interests (commonly known as “special interests”), and encountering difficulties in motor skills and communication, among other symptoms. It is crucial to recognize that no two people with autism are exactly alike.

Autism often coexists with other conditions, such as obsessive-compulsive disorder (OCD), attention deficit hyperactivity disorder (ADHD), dyspraxia, dyslexia, dyscalculia, depression, and generalized anxiety disorder. People with autism can exhibit exceptional intelligence, artistic or creative abilities, impressive memory, and heightened levels of empathy. Some theories suggest that autism emerged in humans approximately 100,000 years ago. Certain historians argue that autism has played a significant role in humanity's progress, as individuals with autism have exhibited exceptional traits throughout history, including their ability to exist outside of societal norms, excel in complex mathematics (contributing significantly to architecture), and demonstrate remarkable organizational skills.

It is essential to acknowledge that Hans Asperger, despite his contributions to understanding autism, should not be glorified, as he was complicit in sending numerous autistic children under his care to their deaths in gas chambers. Autistic individuals are extraordinary, resilient, and valuable members of our society.” —[Historic Vids](#)



auto

keyword: C keyword: storage class

keyword: Objective-C reserved word

See: AUTO — PL/I

autocracy

“AUTOCRACY — Government which rests in self-derived, absolute power, typified by a hereditary emperor, for example.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

AutoIt

programming language

AutoLisp

programming language

Visual LISP

automated security monitoring

noun “Use of automated procedures to ensure security controls are not circumvented or the use of these tools to track actions taken by subjects suspected of misusing the information system. ” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

See information security continuous monitoring

AUTOMATIC

keyword: PL/I keyword

Abbreviated: AUTO

Attribute

automatic remote rekeying

noun “Procedure to rekey distant cryptographic equipment electronically without specific actions by the receiving terminal operator. See manual remote rekeying.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

Autotune

16 December 2023: “Autotune tip

If you have a vocal bus, and multiple layers of vocals go to it, and you want to apply Autotune Make sure you put it on every track rather than on a bus

It will work wrong on multiple sources at once.

Even if your vocals slightly overlap at some moments.” — [Nathaniel W.](#)

A/UX

abbreviation

operating system

Proprietary OS by Apple for the Apple Macintosh.

UNIX System V with BSD extensions. — [Wikipedia: List of operating systems](#)

Apple Macintosh

availability

noun “1. Ensuring timely and reliable access to and use of information.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; 44 U.S.C. Sec 3542]

noun “Timely, reliable access to data and information services for authorized users.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NSA/CSS Manual Number 3-16 (COMSEC)]

avocado

The avocado is a fruit (a single-seeded berry).

See: **avocado toast**

average tax

Joe Biden claimed in a speech about the economy given to union members at the IBEW Local Union 26 in Lanham, Md., on 15 Feb. 2023, that the “average tax” for billionaires is “about 3%,” which is “a lower tax than a schoolteacher or a firefighter.”

Joe Biden repeats the campaign slogan “No billionaire should be paying a lower tax rate than a schoolteacher or a firefighter.”

Prior to 1983, Social Security was not taxable. In 1983, Joe Biden voted with 88 Democrat and Republican senators to tax up to 50% of Social Security benefits.

In 1993, Joe Biden voted for Bill Clinton’s increase of up to 85% of Social Security benefits. The vote ended in a tie of 50 Democrats and 50 Republicans, with Vice President Al Gore casting the deciding vote.


During the first two years of Joe Biden’s presidency, when Democrats had control of both houses of Congress, Biden led the fight to prevent any rise in the minimum wage, but in just five days he got Congress to outlaw the right for RR workers to strike or even have sick days (signed into law 22 December 2022).

Averest

programming language

avg

keyword: SQL reserved word (z/OS)

See: .avi  — file extension

AWK

abbreviation

programming language

axis

An axis is an invisible line around which an object rotates or spins.

The Earth's axis tilts at 23.5° compared to its orbit around the Sun. This causes the seasons.

Axum

programming language

ayacc

abbreviation

programming language

“

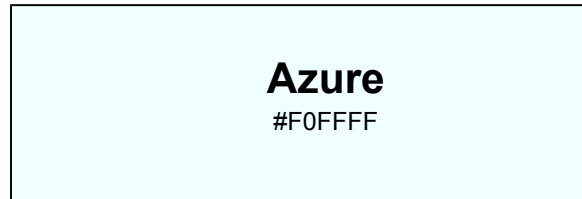
ayacc - UC Irvine. written in **Ada**, produces **Ada** output
ftp://liege.ics.uci.edu/pub/irus/aflex-ayacc_1.2a.tar.Z

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

yacc

Azure

keyword: HTML color name



B b

B

ASCII: 42 hex

UNICODE: LATIN CAPITAL LETTER B

b

ASCII: 62 hex

UNICODE: LATIN SMALL LETTER B

B

programming language

B [(x)]

keyword: PL/I keyword

Format item

Babbage

programming language

backdoor

noun “An undocumented way of gaining access to computer system. A backdoor is a potential security risk.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-82 Rev 1]

backup

noun “A copy of files and programs made to facilitate recovery, if necessary.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-34 Rev 1]

BACKWARD

keyword: PL/I keyword

Abbreviated: BKWD

Option of ENVIRONMENT attribute

BACKWARDS

keyword: PL/I keyword

Attribute

Baga

“The Baga people are a ethnic groups in Guinea. They died fighting European slavers for decades. Their Chief, Tomba, was captured and forced into the slave ship, he died leading a slave revolt on the ship. Teach your kids about African heroes who died for us to be free.” —[Adémólá](#)

bail bonds

4 September 2023: “THREAD. Behind closed doors, a little-known bureaucrat in Los Angeles just signed one of the weirdest—and most dangerous—contracts I’ve seen in my career: it gives huge control over the “justice” system in Los Angeles to the consulting firm Accenture.

After years of hard work by community members, they won an inspiring political victory: they got the largest county in the U.S.—with the biggest, most profitable jail system—to transition to a safer system that prioritizes evidence and care instead of profit and incarceration.

Part of the background: last year, a court finally declared LA’s cash bail system unconstitutional: although it makes billions for the for-profit bail industry, it is unconstitutional to jail people solely because their families cannot pay a cash premium to a private company.

You can read more about that background here, because it’s essential for seeing how corporate profit-seekers are now trying to morph the cash bail system into one of profiting from supervision, surveillance, and electronic monitoring: [judicial ruling](#)

The community has been working against this for years: impacted people, professors, faith leaders, public health experts, philanthropists, organizers, lawyers got to planning, setting up commissions, doing research, making meticulous recommendations, and starting pilot programs.

The wide range of community experts did such a good job that they even got the County government to sign off on their work and adopt it as the County’s plan: [LA County plan](#)

The goal: instead of separating 10,000s of families and putting them in a jail where a lot of people die and contract infectious diseases solely b/c their families don’t have \$, people could be released prior to trial with their families getting treatment and resources they need.

But LA hired a relatively unknown former judge (with controversial reputation among people who know her) to run a crucial department (Justice, Care, and Opportunities Dep’t) tasked with implementing this community vision of care instead of cages. What happened next is baffling.

Accenture, one of the world’s largest consulting corporations, somehow secured from JCOD a multi-million dollar contract to erase and redo the community’s work to plan the County’s pretrial system.

The company started billing the county tens of thousands of dollars for consultant PowerPoint presentations and hundreds of dollars per hour for junior consultants:

Accenture has a long history of working with police and ICE to do exactly the opposite of what LA County voters, officials, and community experts decided they wanted: expand surveillance and incarceration.

Incredibly, the people assigned to milk money from LA County for this contract are like a who’s who of experts in surveillance and police profiteering.

A lot of people in the County government apparently didn’t even know that Accenture was doing this with public money. Everyone I’ve spoken to—from lawyers who work with the county to officials across Los Angeles to community leaders—are in disbelief.

It’s pretty rare to see the profit motive behind the punishment bureaucracy this out in the open, and this flagrantly in violation of the wishes of the community.

The company is positioning itself to convert LA’s pretrial system into one of police surveillance, highly-profitable electronic monitoring, huge windfalls for carceral unions, and more.

Luckily, the community found out about the contract before it's too late. While \$500,000 is already down the drain on PowerPoints and Kick-Off Meetings, LA can still save millions and return to the community plan that local experts already developed.

When we talk about getting involved in something local and making a difference, this is it. We can stop stuff like this. We can end the outsourcing of expertise and profiteering from the incarceration system. You can learn more and get involved here: [Expose Accenture](#) — [Alec Karakatsanis](#)

See: **.bak** — file extension

Balkh

Balkh, Afghnaistan, is about 3,500 years old.

balancing

15 September 2023: “balancing cheat sheet” — [Solar Heavy](#)



15 September 2023: “I always adjust to what I’m hearing, so no set rules, more of an example” — [Solar Heavy](#)

Ballerina

programming language

ballistic knife

noun “A device that propels a knifelike blade as a projectile by means of a coil spring, elastic material, or compressed gas (Penal Code Section 16220)” [from Basic Course Workbook Series, Student

Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

balter

verb Middle English: to dance, tumble, or tread clumsily. Sometimes meaning to dance poorly, but with great enjoyment.

verb Middle English: to become tangled or matted.

ballot access

Help get the Green Party on the ballot for all 50 states for the 2024 election: ballot.greens.org





baloney

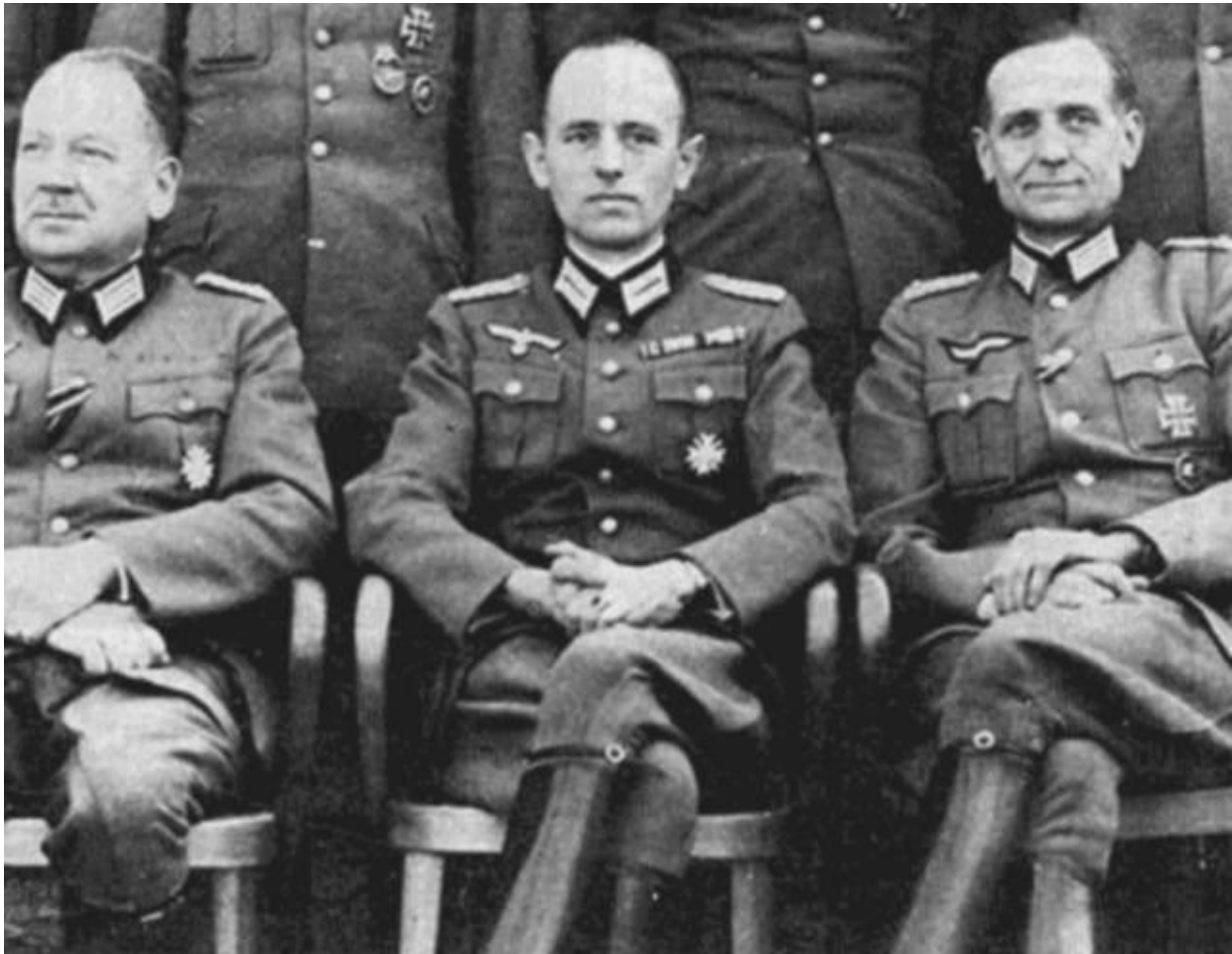
baloney is foolish or deceptive talk; nonsense

bologna is a large Italian smoked sausage of bef, veal, and pork

Stepan Bandera

“Stepan Bandera father of Ukraine

liberals: ‘obviously he was at a costume party’ ” —[Gio DeBatta](#)



bandstand

How do you make a bandstand?
Take away their chairs.

bank scandals

18 March 2023: “A society that rushes to bail out banks, but doesn’t provide universal health care to its people is politically and morally corrupt.” —[Robert Reich](#)

18 March 2023: “JUST IN:

Midsized banks are reportedly requesting the FDIC to insure all deposits for two years per Bloomberg

“Doing so will immediately halt the exodus of deposits from smaller banks, stabilize the banking sector and greatly reduce chances of more bank failures,” the Mid-Size Bank Coalition of America said.” —[unusual_whales](#)

18 March 2023: “California Governor Gavin Newsom lobbied the White House and Treasury on the bailout of Silicon Valley Bank, without disclosing that his private wineries had reportedly been the bank’s clients & he may have even had a personal account at the bank, per the Intercept Silicon Valley Bank previously gave \$100,000 to the governor’s wife, Jennifer Siebel’s charity, in 2021 upon Newsom’s request.” — [unusual_wales](#)

banner

noun “Display on an information system that sets parameters for system or data use.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

Ajuma Baraka

International humanrights activist, organizer, political analyst. National Organizer for [Black Alliance for Peace](#). — [Ajamu Baraka](#)

“Folks, let’s be honest. This debt crisis is a ruling class hustle. It is not the “right-wing” forcing its agenda on the democrats but a drama played out whenever democrats control the executive with the objective to reduce social spending while maintaining military spending.” — [Ajamu Baraka](#)

“Folks, this debt crisis was a phony crisis from the beginning meant to normalize austerity & warmongering. The servants of capital in both parties would not have dared to allow a default. Folks, the people in Congress are not in charge.” — [Ajamu Baraka](#)

“Liberalism is a dangerous cognitive disorder. Folks, this entire settler project has to be dismantled. Later for this partisan BS especially when neoliberals who control the state are driving neofascism while y’all watching the Trump DeSantis diversion.” — [Ajamu Baraka](#)

25 May 2023: “On this African Liberation Day while the world is fixed on the U.S. initiated NATO proxy war in Eastern Europe, let us be reminded that the most devastating war of the last two years took place in another U.S. initiated conflict - Ethiopia - where over 600 thousand people died.” — [Ajamu Baraka](#)

27 November 2023: “Israel and the West will never recover any moral credibility after exposing the true nature of Israeli and U.S. settler-colonialism that has at its core - white supremacy.” — [Ajamu Baraka](#)

Barcelona

18 March 2023: “Barcelona is probably 1st football club to produce a guide to its stadium’s wildlife, after carrying out a census of its animal occupants. The guide is part of the club rethinking its role in the community and environmental impact @einarhandlykken” —[Svein Tveitdal](#): [Barcelona guide to stadium wildlife](#)

See: **.bas** — file extension

BASED[(location-expression)]

keyword: PL/I keyword

Attribute

baseline

noun “Hardware, software, and relevant documentation for an information system at a given point in time.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

baseline configuration

noun “A documented set of specifications for an information system, or a configuration item within a system, that has been formally reviewed and agreed on at a given point in time, and which can be changed only through change control procedures.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4]

BASH

abbreviation

programming language

BASIC

abbreviation

programming language

basic testing

noun “A test methodology that assumes no knowledge of the internal structure and implementation detail of the assessment object. Also known as black box testing.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53A Rev 1]

basis

keyword: COBOL reserved word (z/OS)

bass drum

Also called kick drum.

11 December 2023: “Kick mixing tip

If you hear that kick starts to drown at some point in the mix, or it sounds different and dull in the mix comparing to kick in solo

It is a sign of the conflict. Something is not allowing kick to cut through.

Try to turn off different elements to understand when this problem disappears

When you identify which sound doesn't allow kick to cut through, try to fix it, using either:

- Equalization (cut those frequencies that are important for kick, from the other instrument)
- Multiband compression, similar but in dynamic mode, sidechained from kick
- Spectral compression, same as mb compression but more precise (soothe2). Sidechain from

kick as well.” —[Nathaniel W.](#)

27 December 2023: “Frequent mixing mistake

This mixing mistake ruins both mixes and then masters.

Here is the thing. You may like your kick in solo but in the mix it becomes much less

noticeable and you don't get enough punch out of it.

What people start to do?

They start increasing the kick level, or reach out to transient shaper, or compressor, trying to get more punch out of it.

But they totally forget that the punch in solo is there. And if it's there, it's there.

You lose it in the mix not because of the kick, but because of other instruments. Kick can conflict with pretty much any instrument or even vocals.

Carve out more space for it. Sidechain more sounds from kick, let it breath.

It is a low frequency sound which already needs more loudness to perceive well enough since we hear low frequencies much worse.

When you try to increase the kick level trying to overpower everything, you make it much louder than other sounds. To the point where balance is destroyed.

And while it may sound good in the moment, your limiter will react to this kick very heavily during mastering, that will lead to pumping and hard limitations in terms of how much loudness you will get out of your mix.

It also will reduce the translation of the mix, it can get totally destroyed on other systems.

Conclusion: make sure your kick sounds the same in solo and in the mix. And if it's not, fix it by carving out the space for it.

Check your mixes. I'm almost sure you will hear this problem if you didn't pay specific attention to it.

Follow me for more daily mixing tips @natemixing" — [Nathantiel W.](#)

30 December 2023: "My tips for good bass

1. Sidechain from kick with multiband compressor, whole band below 100-150hz

2. Possibly you can use a second sidechain from kick, broadband compressor, a few db

All sidechain compressors are at fastest settings

3. Tape saturation if needed warmth and richness. Blackbox HG2 or Vertigo VSM-3 to add more aggressive richness.

4. Heavier distortion if needed to cut through (Fabfilter Saturn, Decapitator)

5. soothe2 to remove low resonances (I do it very often because most bass tracks I get are muddy)

6. Cut with EQ 150-200 hz to remove low mid muddiness

7. Adjust sub frequencies by reference and spectrum analyzer if you don't have a full range system

8. dbx160 is a great compressor for bass. 1176 and Distressor recommended also.

9. Sidechain melody and vocals from bass using soothe2 or multiband compressor

10. Find yourself one bass enhancing plugin, highly recommend Low End Focus from iZotope Ozone. Works like charm

11. Make sure you have energy in every bass range: sub bass (if production considers), low bass, mid bass, high bass. Or you will lose translation.

12. If higher frequencies of bass are not audible in the mix, cut them.

13. Cut side information from bass on the master channel if production doesn't consider stereo bass.

14. Pay special attention how your bass sound when you solo Side signal. Muddiness and

rumble there will do twice as more harm.

15. Make sure nothing becomes quieter when you turn on bass. Making sure it doesn't mask anything.

Bonus tip: never use any reverb, unless it's a very well considered special FX at some moments" —[Nathaniel W.](#)

17 January 2024: "Get more body for your kick

Sometimes your kick may have a punch but it's too thin. How to make this kick sound more "fat" and "heavy"?

A great decision would be to use tape emulation device. Analog tapes tend to smoothly round off the transients, leaving the body of your sounds.

You can use this trick to smooth out your other sharp sounds as well.

I use UAD Studer A800 for that." —[Nathaniel W.](#)



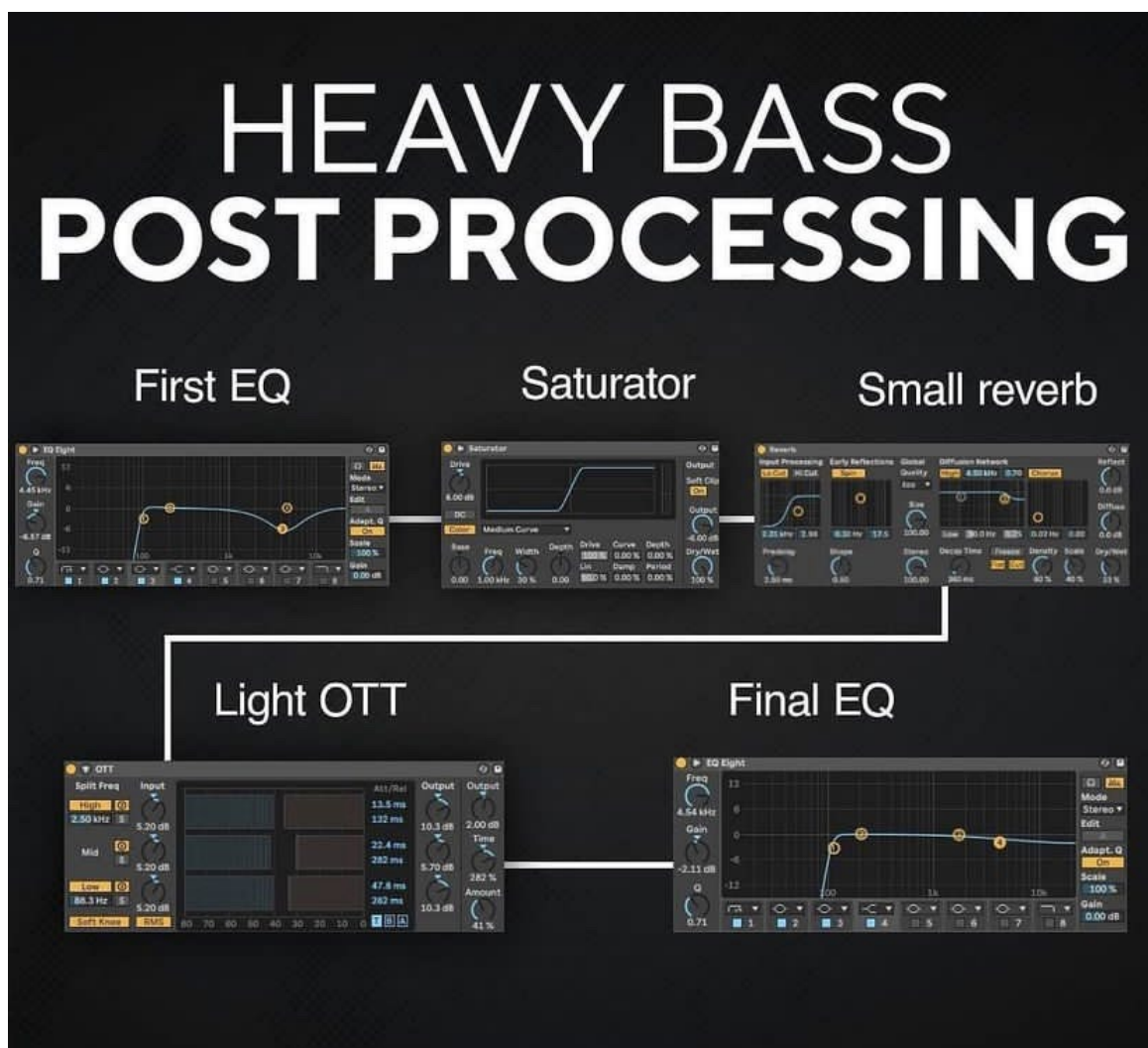
bassoon

Q: What's the difference between an oboe and a bassoon?

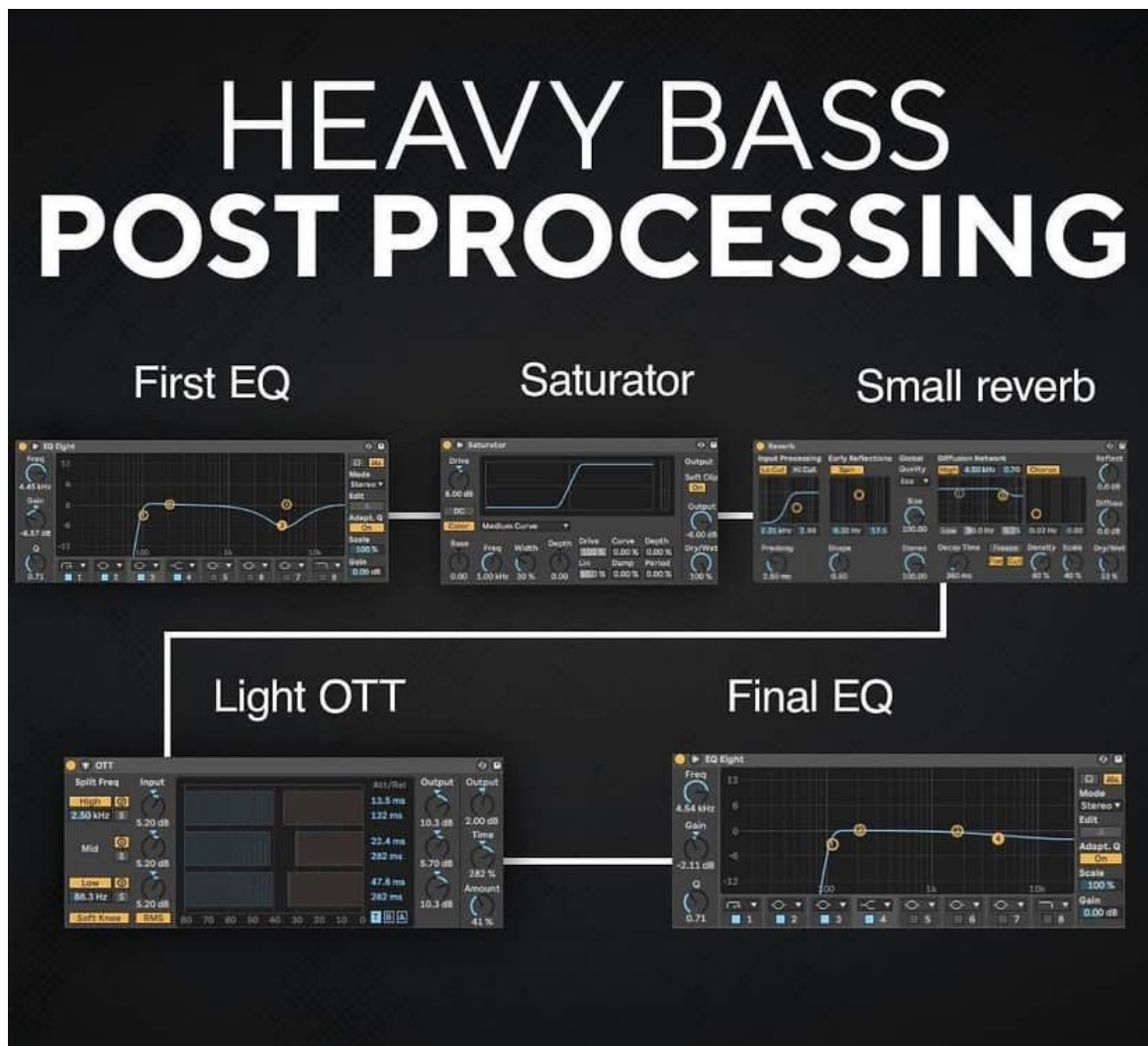
A: You can hit a baseball further with a bassoon.

bass processing

8 September 2023: “bass cheat sheet” — [Solar Heavy](#)



30 December 2023: “heavy bass cheat sheet” — [Solar Heavy](#)



Bast

Bast is an Egyptian Goddess.

bastion host

noun “A special purpose computer on a network where the computer is specifically designed and configured to withstand attacks.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

See: .bar — file extension

bat

“Bats include the vampire bat. These mammals have forelimbs that form webbed wings, making bats the only mammals naturally capable of true and sustained flight.” —[Groups of Mammals](#)

Batch-11/DOS-11

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

Batch file

programming language

Windows/MS-DOS

bc

abbreviation

programming language

Compression: basic calculator

BCPL

abbreviation

programming language

be

part of speech: verb

Oxford English Corpus (OEC) rank: #2

Corpus of Contemporary American English (COCA): #2

Dolch level: Primer

Polysemy: 21

“Be” is a verb in the English language that serves as an auxiliary verb and a main verb. It is a highly versatile verb that is used to indicate various states, qualities, conditions, or existence. As an auxiliary verb, “be” is used in the construction of continuous tenses (e.g., “I am running”) and passive voice (e.g., “The book was written”). It helps to convey ongoing actions, temporary situations, or actions performed on the subject.

[ChatGPT]

As a main verb, “be” functions as a linking verb that connects the subject of a sentence to its complement, describing or identifying the subject. For example, in the sentence “He is a doctor,” “is” links the subject “he” to the complement “doctor,” indicating his profession or identity. “Be” can also express a state of being, such as “I am happy” or “She is tired.” Furthermore, “be” is used in imperatives (e.g., “Be quiet!”) and in conditional sentences (e.g., “If I were you...”).

[ChatGPT]

The forms of “be” include “am,” “is,” “are,” “was,” “were,” “been,” and “being,” depending on the tense, person, and number of the subject. It is an essential and frequently used verb in English grammar.

[ChatGPT]

See: beans

BeanShell

programming language

beatmakers

27 December 2023: “Beatmakers can be sued over drum patterns?”

This isn’t about sampling— if you sample a sound recording, that requires clearance. But copyright law has never covered drum patterns/rhythms.

To be clear, this lawsuit would change the law so that producers/artists who use a drum pattern that another producer/musician claims they invented would be guilty of copyright infringement. This strikes me as a slippery slope as boom bap, trap, EDM, RnB, Disco, Blues, DnB, Afrobeat, Bachata, Salsa, etc all have similar rhythmic foundations.

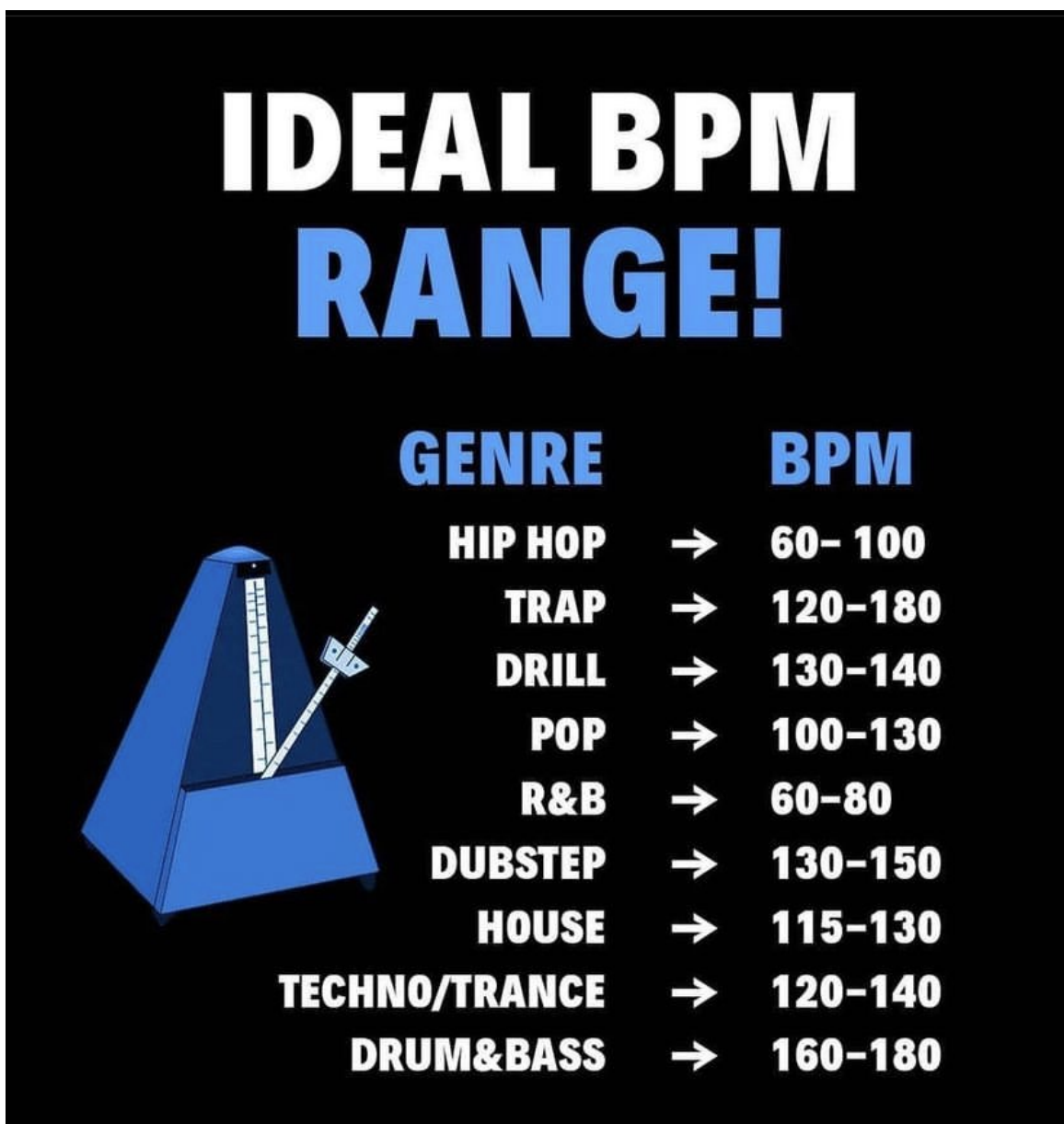
What is more, the producers suing virtually the entire reggaeton genre are claiming ownership

of a drum pattern that I have heard before their ‘fish market riddim’ dropped, for example in Womack and Womack’s ‘Baby I’m Scared of You,’ not to mention tracks like ‘pounder riddim’ that sound much more like the modern Reggaeton drum pattern and sound.

What do you think? Should producers and the music industry in general be concerned?” —[DJ Pain 1](#); includes video

beats per minutes (bpm)

15 October 2023: “bpm cheat sheet” —[Solar Heavy](#)



bed

A local TV show called *Mary Kay and Johnny* was the first TV show to have a scene with a couple in bed together. In 1948 the networks banned TV shows from depicting a couple in bed together.

beer

an alcoholic drink made from yeast-fermented malt flavored with hops

Beer is an [alcoholic beverage](#).

origin:

Origin: There is debate as to where the first beer was brewed, but Sumeria and ancient Egypt (Kemet) were certainly among the first civilizations to brew beer. Half of all the grain grown in Sumeria was used for beer and the ancient Egyptians referred to the beverage as “joy-beer”.

history:

History: Leavened bread from ancient Egypt around 4000 B.C.E. Herodotus called the Egyptians “the bread eaters”. [Onions](#), [bread](#), and beer were the basics of Egyptian the diet. Onions were extremely popular and used extensively in cooking. Beer was extremely popular among the ancient Egyptians.

Egypt: [Barley](#) was popular in ancient Egypt, where it was used to make bread and to make barley beer sweetened with honey. Barley beer is likely to have been the first alcoholic beverage humans made.

History: The Little Ice Age (from the 14th to mid-19th centuries) is the reason that Americans today now drink eleven (11) times as much beer as wine. The lower temperature hurt wine production (grapes required warmer climate) and encouraged the production of beer.

History: Prior to the American Revolution, George Washington made beer with [molasses](#).

Day Beer Flowed: At 12:01 a.m. April 7, 1933, beer was legally available in the U.S. again. Incoming President Franklin Roosevelt convinced Congress to pass a Constitutional Amendment repealing the infamous 18th Amendment (Prohibition, which outlawed alcohol except for religious use by the Roman Catholic Church). It took eight months for the 23rd Amendment (revoking Prohibition) to be ratified by enough states. Roosevelt convinced Congress to modify the Volstead Act on March 13, 1933, changing the definition of “alcoholic” and “intoxicating” beverages from more than 0.5% to more than 3.2%, thereby making beer legal. Throughout the United States, sirens, fire alarms, and train whistles greeted the legalization of beer.

Approximately 800 persons stood outside the White House while two cases of beer were turned over to the Secret Service for delivery to President Roosevelt.

nutritional information:

Alcohol is harmful to the [liver](#) and therefore should be reduced or eliminated from your diet.

Beer is abundant with silicon (a trace mineral and an element) that helps prevent the body from absorbing aluminum. Aluminum is a neurotoxin and plays a role in the development of Alzheimer's disease. Do not drink more than one beer a day, as drinking more is related to increased risk of breast cancer. The silicon in beer can also help prevent osteoporosis by strengthening bones (similar to the role of calcium) and preventing loss of calcium in bones.

See also Chinese herbalism below for Chinese gender and Chinese flavor.

magickal correspondences and uses:

Western element: [fire](#)

Magickal uses: purification

Beer was used for purification magick.

ritual uses:

Ritual uses: Lammas celebrations include offerings of bread and beer.

January 6: Twelfth Night: European holy day. Day to clean up the debris from the Yule Feast.

Wassailing: Pre-Christian Germanic tradition was to wassail, which comes from the Anglo-Saxon phrase *waes hael*, which meant “to be whole” or “to be healthy”. The Anglo-Saxons would toast each other's health and share drink from a large wooden bowl. The wassail drink was called “lamb's wool”. The traditional mixture was made by adding spices to hot [ale](#), beer, or mead. In more recent times it has been made from hot apple cider. The traditional spices included: nutmeg, ginger, and cinnamon (especially nutmeg), sweetened with sugar, honey, or sugar-coated crab apples (especially honey). The mixture was served hot and often topped with toasted bread.

May 5: Cinco de Mayo: Mexican holiday. The fifth of May. Celebrates the Battle of Puebla, May 5, 1862, in which the Mexican army under General Ignacio Zaragoza Seguín defeated a much larger attacking French army at the city of Puebla. This day is primarily celebrated as a historical event in the Mexican state of Puebla and also celebrated as a beer drinking holiday in the United States.



painting by Mike
Manning,
released into the
public domain

July 6: Kemetic (ancient Egyptian) tradition. Do not taste bread or beer on this day. (from the Cairo Calendar)

August 1: Lammas: Wiccan holy day. One of the eight Wiccan Sabbats. Lammas is derived from “loaf-mass”, which in turn is derived from Lughnasadh.

Celebrated in modern times with offerings of bread and beer.



October 8: Day of Erik the Red: Norse (Asatru) holy day. Day of remembrance of Erik the Red, a follower of [Thor](#), first Viking to land at Greenland (there were already native Americans there). His son, Leif Erikson, founded Vinland. Members of Asatru drink a beer in honor of Erik the Red.

November 4: Day of making ointment for Asar: Kemetic (ancient Egyptian) holy day. The day of making ointment for [Asar](#) [Osiris]. Do not taste bread or beer. Drink only grape juice or wine until the sun sets.

November 23: Nihinahe or Shinjosai Festival: Japanese holy day. Nihinahe or Shinjosai Festival, for Konohana-Hime, Dive Ata Princess, grand-daughter of Amaterasu, the Sun Goddess. Celebration of the rice harvest and saki (a rice



November 28: Feast of Het Heret and Sekhmet: Kemetic (ancient Egyptian) holy day. Feast of [Het Heret](#) [Hathor] and [Sekhmet](#). Honors [Het Heret](#) [Hathor] as [Sekhmet](#), Lioness, Sun Goddess, and Beer Goddess, getting drunk on red beer and returning to a gentle form.

December 31: Feast Day of Sekhmet: Kemetic (ancient Egyptian) holy day. Feast Day of [Sekhmet](#). This feast day typically includes the drinking of red beer. [Sekhmet](#) is Goddess of Endings, but in the ancient calendars this feast was celebrated in the middle of the month of Mekhir. Did the ancient priestesses know that this would be the end of the year in our modern calendar?

wedding reading

Wedding reading from ancient Egypt:

“Let My Love Love Me Best”,

from the Turin Papyrus, in the Ramesside period circa 1100 BCE, Egypt.

Let my love love me best and I shall ordain
 Her hands full of lotus blossoms and flowers
 Full of buds and perfumes, strong ale
 And beer of every brewable kind
 Then she'll give me, her love, a day to remember
 Make me drink down this day to its last shadow

Ntr Sentra poem

Mau Bast! Mau Bast!
A Basti, per em setat,
erta-na chu em asui
***neter sentra** semu hena net'emmit,*
hetep ab em asui tau heqt.

Translation:

Hail [Bast](#)! Hail Bast!

Hail Bast, coming forth from the secret place,
 may there be given to me splendor in the place
 of **incense** (cannabis smoke), herbs, and love-joys,
 peace of heart in the place of bread and beer.

deities associated with beer:

- [Aset](#) (Kemetic/ancient Egyptian Goddess)
- [Asar](#) (Kemetic/ancient Egyptian deity)
- [Gobniu](#) (Celtic deity)
- [Hathor](#) (Kemetic/ancient Egyptian Goddess)
- [Het Heret](#) (Kemetic/ancient Egyptian Goddess)
- [Isis](#) (Kemetic/ancient Egyptian Goddess)
- Kremana (Slavia)
- [Osiris](#) (Kemetic/ancient Egyptian deity)
- Shoney (Scotland)
- Tenemit (Kemetic/ancient Egyptian Goddess)

Beer was used in offerings to several ancient deities. Beer was also used for purification.

health care uses:

Health Notice: Attempting to be an amateur doctor is potentially dangerous to your health.

This web page is *not* professional medical advice. Nothing on this website should be considered as a substitute or replacement for professional medical advice. Persons should seek the advice of qualified health providers. **Self-medication should *not* be used as a substitute for professional medical care. Please confirm all self-medication with your doctor or health care professional.**

Beer is abundant with silicon (a trace mineral and an element) that helps prevent the body from absorbing aluminum. Aluminum is a neurotoxin and plays a role in the development of Alzheimer's disease. Do not drink more than one beer a day, as drinking more is related to increased risk of breast cancer. The silicon in beer can also help prevent [osteoporosis](#) by strengthening bones (similar to the role of calcium) and preventing loss of calcium in bones.

Chinese herbalism:

Chinese gender: strongly [yin](#) (cool)

cautions and contraindications:

Cautions and contraindications: You want to reduce or eliminate [alcohol](#) from your diet. Alcohol is harmful to the [liver](#).

before

keyword: COBOL reserved word (z/OS)

begin

keyword: Ada reserved key word

keyword: PL/I keyword

Statement

keyword: BEGIN (all caps) Ruby reserved word

keyword: begin (all lower case) Ruby reserved word

keyword: SQL reserved word (z/OS)

keyword: VHDL reserved key word

beginning

keyword: COBOL reserved word (z/OS)

behavior analysis

noun “The act of examining malware interactions within its operating environment including file systems, the registry (if on Windows), the network, as well as other processes and Operating System components.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSI No. 1011]

BeIA

abbreviation

operating system

Proprietary OS by Be Inc.

Beige

keyword: HTML color name



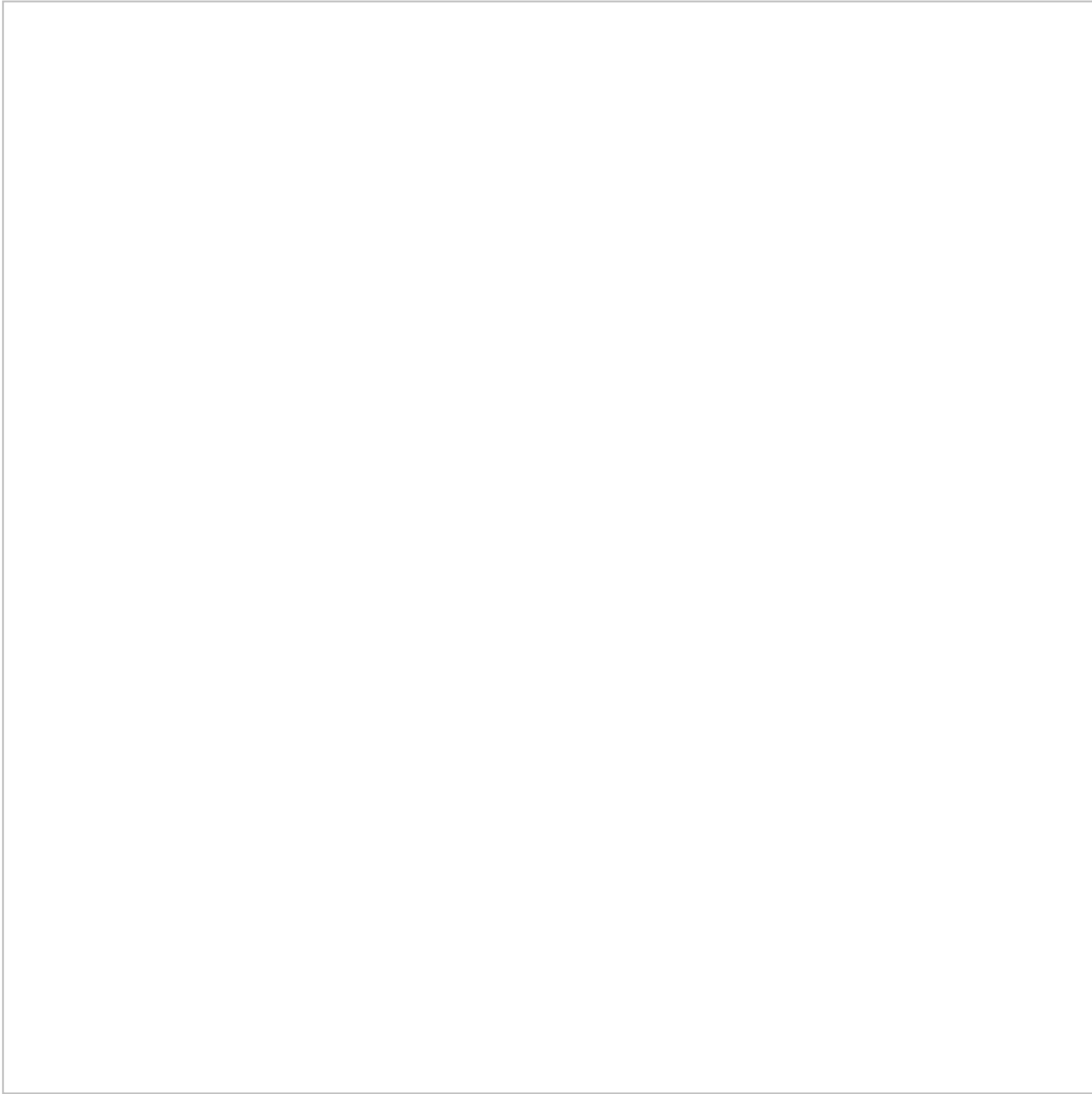
Beirut

Beirut, Lebanon, is about 5,000 years old.

6 December 2023: “To be a child of war is to have scars that never fully heal.

I survived years under heavy shelling in Beirut and I still wake up with night terrors almost 50 years later.

The image below is near where I grew up. It's why my heart breaks for all children in conflict zones.” — [Peter Daou](#)



bel

bel (*plural* bels)

part of speech: noun

A measure of relative power, defined as $\log_{10}(P_1/P_2)$, where P_1 and P_2 are the measured and reference power respectively.

etymology: named for Alexander Graham Bell

derived term: decibel (dB)

Belgium

“King Leopold used to chop off the hands of Congolese people when they don’t meet up to the daily quota of rubber during the colonial period. Today, there are hand-chocolate candies in Belgium celebrating Leopold.” —[Adémóla](#)

belt buckle gun

noun “A firearm mounted on, or appears to be, an integral part of a belt buckle; it can be detached from the buckle and used as a weapon see unconventional pistol (Penal Code Section 17270)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

belt buckle knife

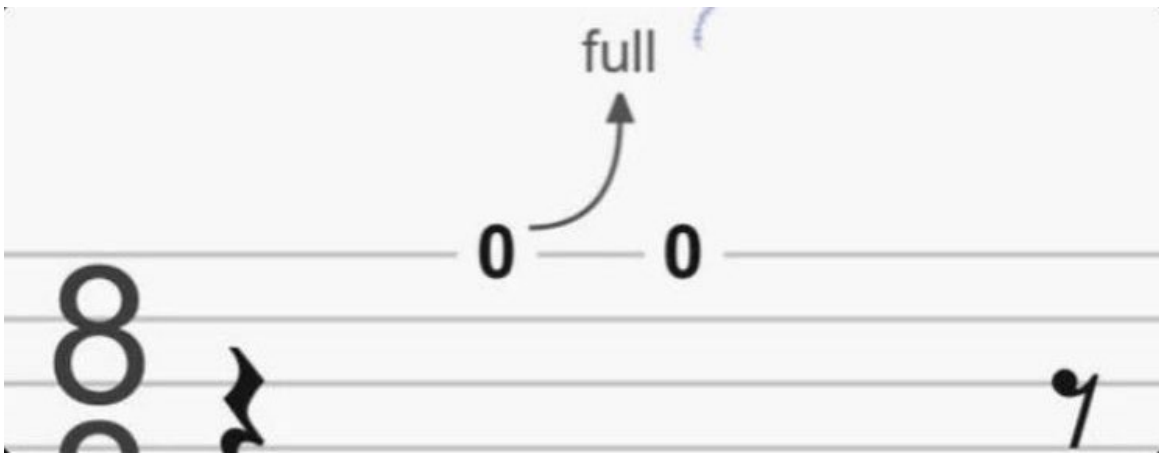
noun “A knife which is an integral part of a belt buckle and consists of a blade with a length of at least 21½ inches (Penal Code Section 16260)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

belief

“People are not stupid. They believe things for reasons. The last way for skeptics to get the attention of bright, curious, intelligent people is to belittle or condescend or show arrogance towards their beliefs.” —Carl Sagan

bend

18 December 2023: “Anyone have ideas on how to do a full bend on an open string?” —[3PickupMusicMan](#)



18 December 2023: “Use a finger to bend the open string between the tuning peg and nut (works great, done it for years)!

You can either pick the open string then bend it up or — like #TonyIommi’s iconic intro to #Ironman — bend it first then pick and release it for a downward bend.

#BlackSabbath” — [Chuck Marble](#)

18 December 2023: “Isn’t that a behind the nut bend? I know Jimmy Page and Tony Iommi used that technique. I’ve never got that hang of it.” — [realitybased1](#)

benign environment

noun “A non-hostile location protected from external hostile elements by physical, personnel, and procedural security countermeasures.” [from Committee on National Security Systems (CNSS)

Glossary, CNSSI No. 4009, US federal government]

BeOS

abbreviation

operating system

Proprietary OS by Be Inc.

BeOS 55.1d0

abbreviation

operating system

Proprietary OS by Be Inc.

Bert and Ernie

Sesame Street characters Bwert and Ernie were named after police officer Bert and taxi driver Ernie from the frank Capra movie *It's a Wonderful Life*.

BESYS

abbreviation

operating system

Proprietary OS by IBM

for the IBM 7090 — [Wikipedia: List of operating systems](#)

BESYS

abbreviation

operating system

Proprietary OS by Bell Labs.

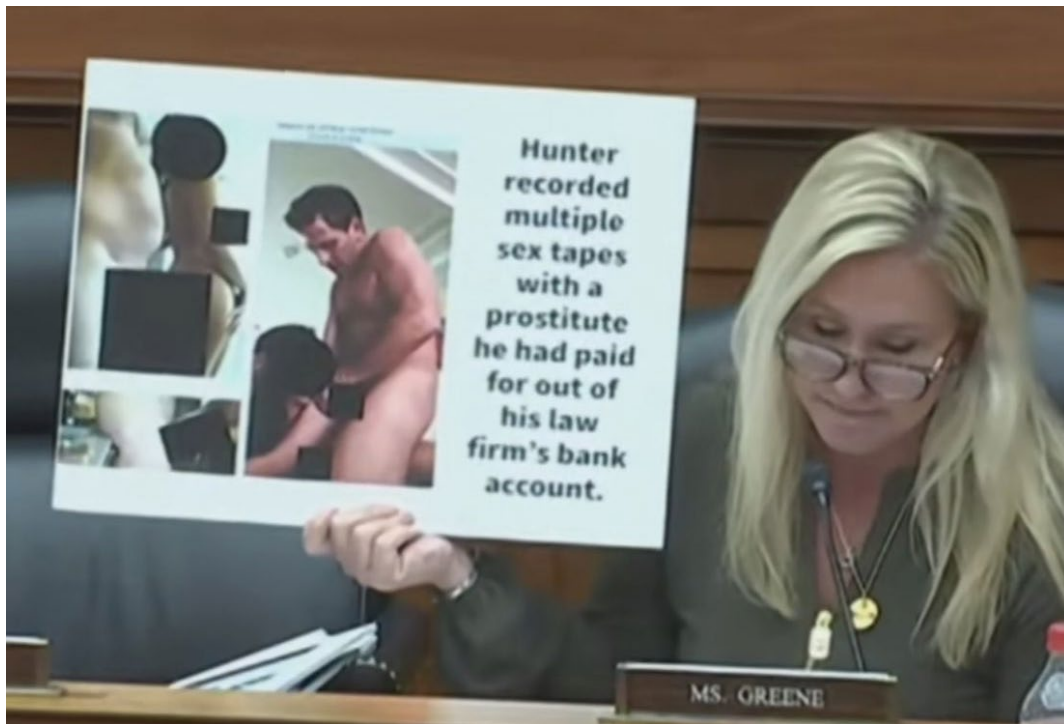
BETA

programming language

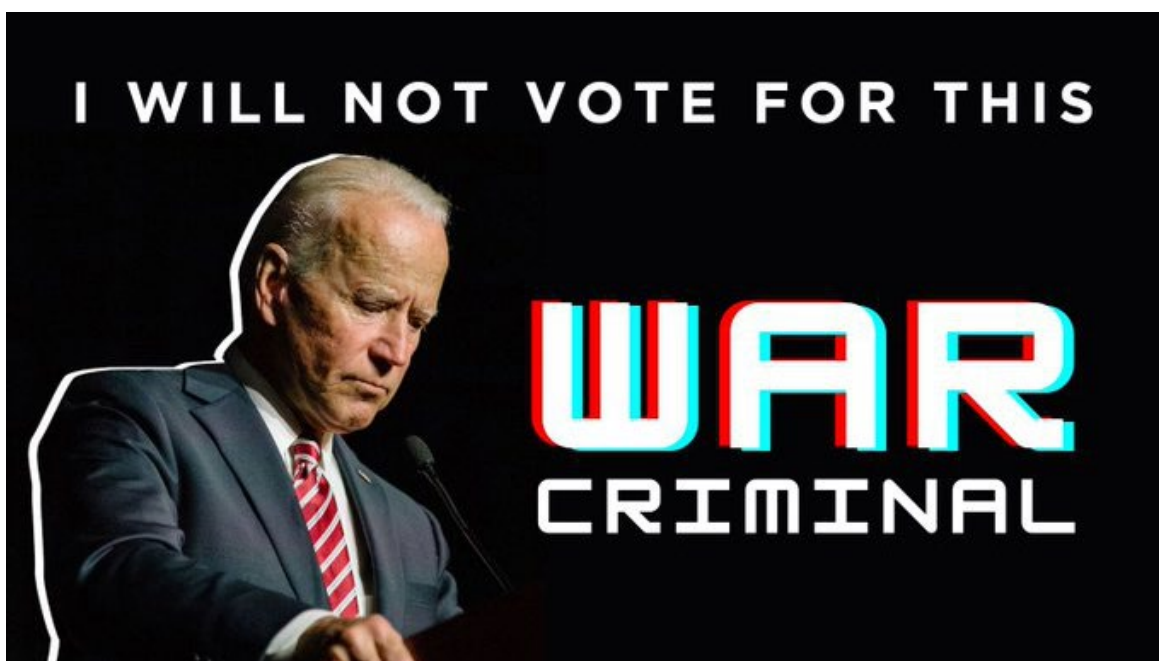
between

keyword: SQL reserved word (ANSI, Oracle, z/OS)

Hunter Biden



Joe Biden



“I know what is good for the negro.” —Joe Biden, 1973

“I oppose busing. It’s an asinine concept, the utility of which has never been proven to me.”
—Joe Biden, 2 October 1975

“Taking this son of a taking — Saddam down [is the only way to guarantee Iraq’s disarmament]” —Joe Biden, 1998 Senate hearing, five years before the U.S. invasion of Iraq

“I mean, you got the first mainstream African-American who is articulate and bright and clean and a nice-looking guy. I mean, that’s a storybook, man.” —Joe Biden speaking about Barack Obama, 31 January 2007

“We should challenge students in these schools. We have this notion that somehow if you’re poor, you cannot do it. Poor kids are just as bright and just as talented as white kids.” —Joe Biden, 8 August 2019

“We cannot let this we we’ve never allowed an any crisis from the Civil War straight through the to the pandemic of seventeen all the way around sixteen we have never ever let our democracy sakes second fiddle way they we can both have a democracy and elections at the same tiime.” —Joe Biden, 6 April 2020

“And by the way, what you all know but most people don’t know, unlike the African American community with notable exceptions, the Latino community is an incredibly diverse community with incredibly different attitudes about different things. You go to Florida you find a very different attitude about immigration in certain places than you do when you’re in Arizona. So it’s a very different, a very diverse community.” —Joe Biden, 6 August 2020

Policy on Cuba: same as Trump

Policy on selling arms to Saudi Arabis: same as Trump

Policy on Syria: same as Trump

Policy on China: same as Trump

Policy on Iran: same as Trump

Policy on Venezuela: same as Trump

Policy on Wall Street billionaires: same as Trump

Policy on Israel: same as Trump

Policy on for-profit healthcare: same as Trump

Policy on militarizing police: same as Trump

Policy on taxing the rich: same as Trump — [Ryan Knight](#)

Biden has made more white supremacy speeches, given more eulogies to former KKK Grand Cyclops, called more segregationists close friends, and imprisoned 5 million+ more Black men than Trump ever did. Yes, Trump is a racist bigot too.

13 July 2023: “Thank you, Biden supporters. You have defeated universal health care, climate action, debt relief, wealth tax, college for all, expanding Social Security, justice reform, internet for all, campaign finance reform, and any hope of peace.

Trump couldn't have done it better himself.” — [Bill Burke](#)

25 July 2023: “I said I'd cure cancer. They looked at me like, why cancer? Because no one thinks we can. That's why, and we can. We ended cancer as we know it.” — [New York Post](#); includes video

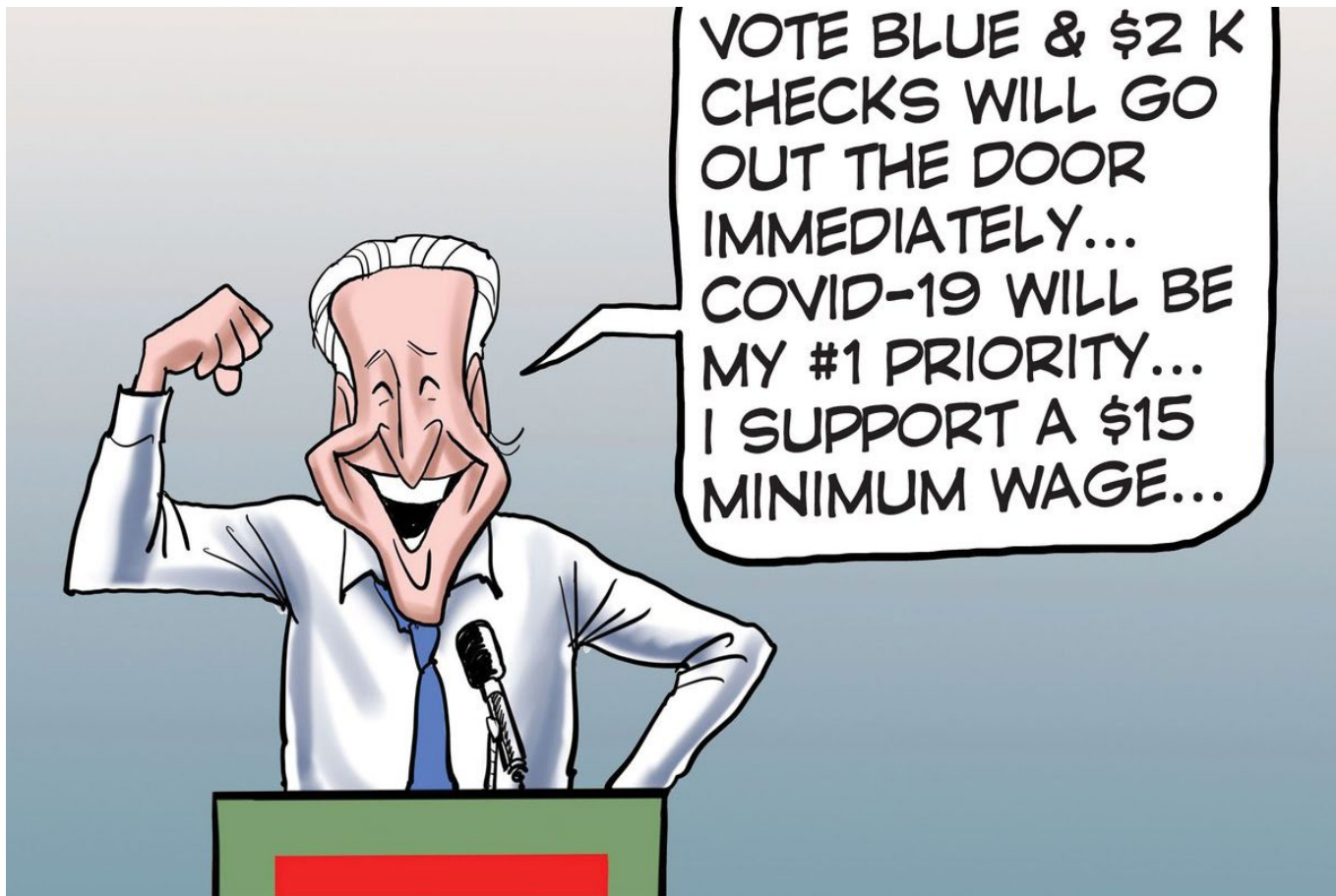
26 November 2023: “Biden proposes \$1 trillion in official spending cuts after announcing \$375 million more for war in Ukraine.” — Barry Grey

Joe Biden got caught cheating in law school and has a decades long history of absurdly ridiculous lies.

“I've acquired a hell of a lot of wisdom and know more than the vast majority of people. I'm more experienced than anybody who has ever run for the office. And I think I've proven myself to be honorable as well as effective.” — Joe Biden (6 May 2023)

25 July 2023: “One of the things I'm always asked is, ‘Why Americans have sort of lost faith for a while in being able to do big things?’ ‘If you could do anything at all, Joe, what would you do?’ I said, ‘I'd cure cancer.’ And they looked at me like, ‘Why cancer?’ Because no one thinks we can. That's why, and we can. We ended cancer as we know it.” — Joe Biden (25 July 2023); the official White House transcript, at the time of adding this, more than a week later, blatantly lies about what Biden said. The speech was televised. You can watch the video yourself. Biden and the Democrats are just as much liars as Trump and the Republicans.

30 July 2023: “Don't forget 2020 Joe Biden in 2024.
Vote Green this time.” — [Etaoin Shrdlu](#)



4 August 2023: “Joe Biden has the distinct privilege of being the president who saw the world move the closest to midnight on the Doomsday Clock than at any time in human history. His proxy war and his doubling down on fracking and drilling is a threat to all humanity.”

—[Professor Anthony Zenkus](#)

10 August 2023: “U.S. President Joe Biden asked Congress to approve about \$40 billion in additional spending on Thursday [9 Aug], including \$24 billion for Ukraine and other international needs, \$4 billion related to border security and \$12 billion for disaster relief.” — Reuters

11 August 2023: “Whom are we dividing by criticizing Biden? Normie Dems hate us, the left is not voting for him, and that leaves those sacred suburban republicans. Do they imagine even one has ever said to themselves & “I’m leaning Biden but I should really check in with left Twitter”? ” —[mousdrv1](#)

14 August 2023: “Biden acts faster to get cluster bombs to Nazis than he does to get relief to the working class.” —[Birriion](#)

14 August 2023: “Sending only a one-time \$700 payment to the people of Maui who have lost EVERYTHING while sending \$115 billion to Ukraine shows how much you don’t care about the people in our country.” —[Ryan Knight](#)

11 September 2023: “Reasons not to vote for Joe Biden

- Nordstream pipeline bomber. Biggest eco terrorist in human history
- Approved of the willow project
- Broke the rail strike
- Gave federal contracts to union busters
- Sent Covid-19 relief money to the police
- Funded ICE to record levels. 6 billion more than Trump
- Illegally pressuring social media companies to crack down on free speech
- Fighting proxy war with Russia by sending weapons to nazis in Ukraine
- Stealing BILLIONS from Afghanistan, starving their people
- Absolutely unhinged China policy
- Sent weapons to Taiwan
- sent nuclear submarines to Australia
- Hunter Biden pay the play corruption
- Hiring Neera Tanden as White House Domestic Policy Adviser
- Hiring Antony Blinken
- Hiring Lloyd Austin from Raytheon as Defense Secretary
- full fledged support to the genocidal state of Israel
- pushing the privatization of water
- Insulting Maui response
- said he would veto medicare for all
- Kamala Harris could become president” — [Revolutionary Blackout Network](#)



30 August 2023: “Joe Biden’s promise to effectively deal with climate disappeared when he approved more drilling than Trump, including the Willow Project and Mountain Valley Pipeline. The path to a livable planet lies with Cornel West and the Green Party.” — [Professor Anthony Zenkus](#)

21 September 2023: “President Biden reelection campaign launches strategy to combat

misinformation on social media

The group will be led by Rob Flaherty, deputy campaign manager; Michael Tyler, communications director; and Maury Riggan, general counsel, as well as aides from the rapid response communications team and legal team.

The goal of the cross-campaign effort is to publicly push back on disinformation with “an army of folks” who can push back get information out to the public like Biden campaign officials, allies, surrogates and influencers.

The new working group is a shift from previous strategies in which campaigns could ask and expect social media companies to take down content deemed to be misinformation. The shift comes in the new age of X, formerly known as Twitter, and the rise of other platforms such as Truth Social, where former President Trump often posts. The campaign’s strategy could also involve taking legal actions in states with laws against deepfake technology and applicable copyright laws.” —[the Hill](#)

[why one Democrat calls for voting for Biden] 27 October 2023: “Biden is supporting a genocide

However, you should still vote for him. Trump would have been cheering for Gaza to be flattened and turned into his new personal golf course. Democrats are still vastly better than Republicans and it’s not even close” —[theana](#)

27 November 2023: “Obama and Biden had a “Muslim Ban” - they just didn’t call it that.” —[Professor Anthony Zenkus](#)

27 November 2023: “The “a vote for Joe Biden is a vote for democracy” loses a bit of steam after Democrats held the House, Senate, and White House and allowed the filibuster and parliamentarian stand in the way of passing voting rights legislation.” —[Nina Turner](#)

2 December 2023: “My question is how do any people of color OR any LGBTQ+ people still justify supporting Biden and his regime of racist, warmongering, genocidal Democrats by claiming he is better than Trump?

He is doing everything they condemned Trump for doing and WORSE!” —[Joe Mannetti](#)

2 December 2023: “Trump is horrible, absolutely.

The GOP is terrible, no doubt.

But how do Dems justify their own leaders caging migrant kids, stealing money from starving families in Afghanistan, arming the slaughter of civilians in Yemen, and aiding the massacre of children in #Gaza?

HOW??” —[Peter Daou](#)

2 December 2023: “The promise in 2020 was “Vote for Joe and you’ll have a seat at the table”. We didn’t even get a foldout chair at the kiddie table. We weren’t even allowed in the tent. In fact they shooed us away from the buffet. There’s a 7-eleven down the street go get a burrito!” —[mousedrvr](#)

2 December 2023: “Biden helping Netanyahu murder thousands of Palestinian children is worse than anything Trump did.

Dispute that.

Killing children is the ULTIMATE moral monstrosity.

By that standard, Biden aiding and abetting the ethnic cleansing of Palestinians is a grievous and profoundly immoral act.

And my point is not that Trump’s policies would be any better if he were president now. That’s a hypothetical.

The **REALITY** is that Biden is complicit in a genocide, aiding and abetting collective punishment on a gruesome scale.

Worse than anything Trump did.

I slammed Trump for his heinous policies, whether in Yemen, his Covid failures, or his crimes against humanity at the border.

But Biden has done worse: Continued arming the Yemen slaughter, caged migrants, presided over far more Covid deaths, and enabled the massacre in #Gaza.

And please spare me the “Biden is saving democracy” propaganda. If you still believe that after everything we’ve seen from this administration, I have a bridge to sell you.

Bottom line: **BOTH RULING PARTIES MUST GO.**

#EndTheDuopoly

One more thing to add to Biden’s long list of horrors: Sending depleted uranium and cluster munitions to Ukraine, which will kill Ukrainian children for years.

Again, Trump is horrendous. Unbelievably, Biden has managed to do even worse.” —[Peter Daou](#)



4 December 2023: “Remember when Ronald Reagan convinced white people they were the real victims of racism? Yes, and now Democrats praise him, Joe Biden in particular.” —[Etaoin Shrdlu](#)

4 December 2023: “The Horrors In Gaza Are Happening Because The US Empire Wants Them To Happen

I came across an interesting quote made last month by a retired Israeli major general named Yitzhak Brick about the ongoing IDF assault on Gaza.

“All of our missiles, the ammunition, the precision-guided bombs, all the airplanes and bombs, it’s all from the U.S.,” Brick said. “The minute they turn off the tap, you can’t keep fighting. You have no capability. ... Everyone understands that we can’t fight this war without the United States. Period.”

Brick made these observations not as an anti-imperialist critique of the US war machine, but as part of a diatribe about how ridiculous it is for Israel to be asked by Washington to allow humanitarian aid into Gaza and to try to avoid civilian casualties. He apparently believes Israel should be killing far more Palestinians in Gaza, not fewer.

Brick — whose warnings of an impending Hamas attack were dismissed and ignored by Israeli government and military officials in the lead-up to the events of October 7 — makes an important point nonetheless. The support of the US war machine is absolutely 100 percent essential for Israel's continued murderous onslaught in Gaza, which just killed some 700 people in a single 24-hour period. This necessarily means that these ongoing acts of human butchery are occurring because the US permits them to.

Brick's comments fly in the face of narratives fed to the press by the Biden administration saying that the White House is frustrated by Israel's complete disregard for human life in Gaza but finds itself powerless to influence its ally's actions in a more humanitarian direction.

In an article published last month titled "White House frustrated by Israel's onslaught but sees few options," *The Washington Post* reports that according to unnamed US officials the Biden administration believes that "Israel's counterattack against Hamas has been too severe, too costly in civilian casualties, and lacking a coherent endgame, but they are unable to exert significant influence on America's closest ally in the Middle East to change its course."

This is of course a load of bullshit. The Biden administration could end all this with one phone call, in the same way it commanded Israel to restore Gaza's communications in October after the IDF cut the enclave off from the world, and in the same way Israel's 1982 assault on Lebanon was halted with a phone call from President Reagan.

The ongoing massacre in Gaza is happening because the US empire wants it to happen. They could stop the bloodshed at any time, but they don't, because they do not want to. This is because the US empire is run by sociopaths who only care about global domination, and nonstop violence from Israel is a key component in the domination of a crucial geostrategic region on this planet.

Don't let the monsters in Washington DC and Virginia wash their hands of this horrific atrocity. They know exactly what they're doing. They're every bit as responsible for Israel's crimes against humanity as Israel itself. They posture and pay lip service to the protection of civilian lives, but they do so exclusively for their own PR interests. These freaks would happily send every Palestinian alive to the gas chambers if they thought it would advance their strategic interests one iota." —[Caitlin Johnstone](#)

6 December 2023: "Breaking: Biden raises the possibility of World War 3 with "American troops fighting Russian troops". To be clear a war between two nuclear powers is guaranteed to end with nuclear war. Didn't the Democrats insist that Trump would start World War 3?" —[Kim Dotcom](#)

14 December 2023: "Taxpayers are already chipping in making paying a lot of money. Isn't it nice to get these brilliant scientists who go out and find cures find answers to the drug problem to drugs or for the use of drugs for health problems." —Joe Biden in a [video clip](#)

15 December 2023: "Joe Biden's presidency has been nothing short of sociopathic:

Aiding and abetting the Gaza genocide

Barbaric border policies, caging kids

Hundreds of thousands of Covid deaths

Starving millions in Afghanistan

Arming the Saudi slaughter in Yemen

A horrific record.” —Joe Biden in a [Peter Daou](#)

20 December 2023: “I come from a state that has the eighth-largest Black population in the country, and as they say the saying goes where I come, you brung me to the dance early on!” —[video clip](#)

31 December 2023: “In 2021/2022, with a pandemic raging, Joe Biden had the authority to extend Medicare to every adult and child in the US- without Congressional approval. He refused. This week he went around Congress for the 2nd time to give more weapons to Israel to kill Palestinians.” —[Prof Zenkus](#)

9 January 2024: “Democrats don’t understand that they’re not just losing voters in 2024, they’re losing them for life. Apparently genocide doesn’t sit well with some people.” —[Prof Zenkus](#)

10 January 2024; Peter Daou replies to the claim by paid DNC spokesperson [Victor Shi](#): “Ignore the headlines. Our economy is booming. There is no recession. And it is all because of Joe Biden.” “

- Record high homelessness
- Record high suicide rates
- Doubling child poverty
- Soaring cost of living
- Widespread food insecurity
- Stagnant minimum wage
- Dwindling personal savings
- Plummeting life expectancy
- Obscene income inequality
- Teen mental health crisis
- Skyrocketing military budget
- Unrelenting gun violence
- Pervasive racism and bigotry
- Abuse of asylum-seekers
- Raging climate emergency
- GENOCIDE IN PALESTINE” —[Peter Daou](#)

11 January 2024: “Donald Trump is not the alternative to Joe Biden. Neither one should be president ever again.” —[Stephanie Voltolin](#)

12 January 2024: “Biden just starts fucking bombing people and doesn’t even address the nation. Just goes around eating ice cream and shit. I fucking hate it here.” —[Jason Overstreet](#)

Navy Joan Biden

28 July 2023: “BREAKING - YOUR REACTION: Following widespread condemnation, shock, and disgust, President @JoeBiden finally recognizes his seventh granddaughter, 4-year-old Navy Joan Roberts.

In a statement to People Magazine, rather than the White House pool, President Biden said, “Our son Hunter and Navy’s mother, Lunden, are working together to foster a relationship that is in the best interests of their daughter, preserving her privacy as much as possible going forward.”

“This is not a political issue, it’s a family matter,” President Biden’s statement continues. “Jill and I only want what is best for all of our grandchildren, including Navy.” — [Simon Ateba](#)

29 July 2023: “It only took him 4 years to acknowledge his own grandchild. Just imagine what he can do in another 4 years.” — [Johnny Akzam](#)

WHITE HOUSE

Biden publicly recognizes grandchild, Hunter’s 4-year-old daughter, for first time

The president says he and first lady “only want what is best” for all of their grandchildren.



Navy Joan is Hunter Biden’s daughter with Lunden Alexis Roberts.

“I do look down on Biden for intentionally undercounting his grandkids to not include this one who is beyond a shadow of a doubt his son’s daughter. His son opposes this child having the benefit of this powerful family name. Child did nothing yet these men are making sure she pays.” — [Brett Chapman](#)

“This girl will grow up. These two are all but guaranteeing she has self-worth issues. Once

again, this child did nothing. It's so antithetical to the Native American way, I guess, that I cannot respect it at all. Nobody is thinking of the girl. So unnecessary.” —[Brett Chapman](#)

“And, last point, but if this were me and I was in Biden's shoes and my son did this, I'd overcompensate for the child by making it my favored grandkid to do something to make up for my son's shortcomings. And I'd reply to attempted political attacks over it by telling them to GFY” —[Brett Chapman](#)



Bidenomics

Joe Biden keeps using the phrase “grow the economy from the middle out and bottom up” Think for a moment. What does that word salad mean? There is no clear obvious meaning to that grouping of words. You can imagine what you guess it might mean. And other people can imagine what they guess it might mean. But there is no obvious shared meaning. The phrase is designed for people to nod along and wrongly assume that Biden means whatever the listener guesses. This is a psychological operation (psy op) technique invented by Edward Bernays and famously honed by Joseph Goebbels, Nazi Reich Minister of Public Enlightenment and Propaganda.

4 August 2023: “Yet Democrats legislate nothing to stop them... just feed the same money monster...” —[Stephanie Voltolin](#)



15 August 2023: “PERSPECTIVE: 71% of Americans say the cost to live in this country is outpacing their wages so when Biden brags about the economy what he is really bragging about is that corporations & billionaires are doing better than ever while the majority of the people struggle to survive.” —[Ryan Knight](#)

1 September 2023 (replying to Joe Biden): “You changed the economic direction in our country alright. You made it worse.

Homelessness and hunger have increased on your watch while corporations have made record profits.

The working class is doing worse too as gas, grocery & rent prices have soared.

BIDENOMICS IS A BUST.” —[Ryan Knight](#)

bi-directional (CDS)

noun “A cross domain device or system with the capability to provide both the transmission and reception of information or data between two or more different security domains (e.g., between TS/SCI and Secret or Secret and Unclassified).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

Big Ben

31 December 2023: “The Houses of Parliament building in Westminster, London, UK, is home to the famous clock tower that houses “Big Ben.” The nickname Big Ben is today often applied to the tower, the clock, and the bell, but originally it applied solely to the largest bell inside the tower. The bell was named for Sir Benjamin Hall, who oversaw the latter stages of the rebuilding of the Houses of Parliament after the 1834 fire. The chimes of four other bells in the tower combine to play the Westminster Quarters tune. On New Year’s Eve 1923, BBC Radio first broadcast Big Ben’s chimes to the UK, and in 1932 the chimes were broadcast internationally as part of King George V’s Christmas address. The structure was renamed the Elizabeth Tower in 2012 to honor the late Queen Elizabeth II’s Diamond Jubilee. The clock itself is the world’s largest four-faced chiming clock.” —CIA World Factbook (material that expires after 30 days)



Big Lie

“If you tell a lie big enough and keep repeating it, people will eventually come to believe it. The lie can be maintained only for such time as the State can shield the people from the political, economic and/or military consequences of the lie. It thus becomes vitally important for the State to use all of its powers to repress dissent, for the truth is the mortal enemy of the lie, and thus by extension, the truth is the greatest enemy of the State.” —Joseph Goebbels

bigotry

25 July 2023: “X-Men is about civil rights. If you didn’t get that, you didn’t get X-Men.
·Black Panther is about colonization. If you didn’t get that, you didn’t get Black Panther.

·Captain America literally fought nazis. He is the embodiment of fighting the alt-right. If you didn't get that, you didn't get Captain America.

·The Empire in Star Wars is fascist. The Rebel alliance are Anti-Fascist. If you didn't get that, you didn't get Star Wars.

·Doctor Who was about an alien fighting for all of humanity in spite of totalitarian regimes. If you don't get that, you don't get Doctor Who.

·The Punisher isn't meant to be a role model for police or armed forces. So much so that the writers of The Punisher made him actively speak out against it in a comic. If you didn't get that, you didn't get The Punisher.

·Deadpool is queer. He's pansexual. Fact. If you didn't get that you didn't get Deadpool.

·Star Trek is about equality for all genders, races and sexualities. As early as the mid-60s it was taking a pro-choice stance and defending women's right to choose. One of its clearest themes is accepting different cultures and appearances and working together for peace. (It's also anti-capitalist and pro-vegan). If you didn't get that, you didn't get Star Trek.

·Superman and Wonder Woman (and a whole host of other superheroes) are immigrants. The stance of those comics is pro-immigration and pro-equality and acceptance. If you didn't get that, you didn't get Superman or Wonder Woman.

·Stan Lee said, "Racism and bigotry are among the deadliest social ills plaguing the world today." If you're bigoted or racist, you didn't get any of the characters Stan Lee created.

·The stories we grew up with all taught us to value other people and cultures and to treasure the differences between us. Only villains were xenophobic, or sexist, or racist, or totalitarian. I can't understand how anyone can have missed that.

·If you're upset that there's a black Spider-Man, or a black Captain America, or a female Thor, or that Ms. Marvel is Muslim, or that Captain Marvel was pro-feminism or any of the other things right-wing "fans" say is "stealing their childhood" - you never got it in the first place. The things you claim are now "pandering to the lefties" were never on your side, to begin with.


·If you consider yourself a fan of these things, but you still think the LGBTQ+ community is too "in your face", or have a problem with Black Lives Matter, or want to "take the country back from immigrants", then you're not really a fan at all.

·Geek culture isn't suddenly left-wing... it always was. You just grew up to be intolerant. You became the villain in the stories you used to love." —[@DAVID THE EXMO COMMUNIST](#)

Big Snake

There's a story of a Ponca man Big Snake being incensed with the government agent sent to remove them in 1877 and he told the guy "drop your words on the land here and go back across the river" and I always thought that was classy way to say STFU. The US Army murdered him though—[Brett Chapman](#)



See:  — file extension

Abebe Bikila

1960: “In 1960, an Ethiopian named Abebe Bikila became the first Black African to win gold in the Olympics. He won it by running barefoot.” —[Typical African](#)

billy

noun “A heavy club (Penal Code Section 16760)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

See: BIN — PL/I attribute

See: BIN — PL/I function

See: .bin — file extension

binary

keyword: COBOL reserved word (z/OS)

BINARY

keyword: PL/I keyword

Abbreviated: BIN

Attribute

BINARY(x[,p,[q]])

keyword: PL/I keyword

Abbreviated: BIN

Built-in function

bind

keyword: SQL reserved word (z/OS)

binding

noun “Process of associating two related elements of information.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

biology

“Biology is the scientific study of life. It is a natural science with a broad scope but has several unifying themes that tie it together as a single, coherent field. For instance, all organisms are made up of cells that process hereditary information encoded in genes, which can be transmitted to future generations. Another major theme is evolution, which explains the unity and diversity of life. Energy processing is also important to life as it allows organisms to move, grow, and reproduce. Finally, all organisms are able to regulate their own internal environments.”

—[Wikipedia](#)

biometric

noun “1. Measurable physical characteristics or personal behavioral traits used to identify, or verify the claimed identity of, an individual. Facial images, fingerprints, and handwriting samples are all examples of biometrics.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; FIPS PUB 201-1 (adapted)]

noun “2. A physical or behavioral characteristic of a human being.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-32]

Bisquick

Bisquick, the first baking mix, was created in 1931.

bison

In 1830, the US started the intentional massacre of bison to remove the major food supply for Native American Plains Indians. The construction of the cross country railroad accelerated the bison massacre. In 1870 alone an estimate 2 million bison were killed on the southern plains. Between 1872 and 1874 an average of 5,000 bison were killed each and every day, totaling more than 5.4 million bison killed in just three years. In 1884, the bison population reached its lowest point, around 325 wild bison in the United States, including the 24 in Yellowstone.

Bison

programming language

“

Bison - from GNU <ftp://prep.ai.mit.edu/pub/gnu/bison-1.21.tar.Z>

—*The Language List*: information from *The Language List*, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

yacc

Bison++

programming language

“

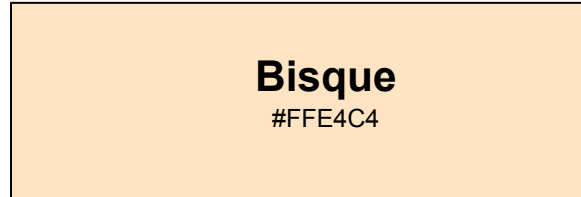
Bison++ - produces C++ output.
<ftp://psuvax1.cs.psu.edu/pub/src/gnu/bison++-1.04.tar.Z>

—*The Language List*: information from *The Language List*, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

yacc

Bisque

keyword: HTML color name



bit

noun “A binary digit having a value of 0 or 1.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; FIPS PUB 180-4]

BIT (length)

keyword: PL/I keyword

Attribute

BIT(expression [size])

keyword: PL/I keyword

Built-in function

bit error rate

noun “Ratio between the number of bits incorrectly received and the total number of bits transmitted through a communications channel. Also applies to storage.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

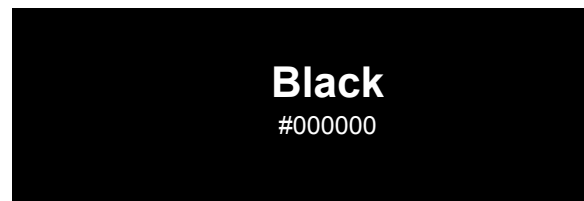
bitch daughter

1475, the phrase “ridden by a bitch daughter” meant to have a nightmare.

See: BKWD — PL/I

Black

keyword: HTML color name



BLACK

adjective “1. Designation applied to encrypted information and the information systems, the associated areas, circuits, components, and equipment processing that information. See also RED.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSI No. 4005 (COMSEC)]

Note: Includes BLACK data.

See: RED

adjective “2. Designation applied to information systems, and to associated areas, circuits, components, and equipment, in which national security information is encrypted or is not processed.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSAM TEMPEST/01-13; NSTISSI No. 7002 (adapted)]

Black America

18 March 2023: “African-American men and depression/suicide is real.” —[Don Salmon](#); info at [account suspended by Elon Musk](#)

18 March 2023: “Timothy Hyatt, a Denver police sergeant, was convicted of attempted sexual assault on a 14-yr-old.

He was sentenced to 4 yrs probation. His record will be erased upon completion.

Crystal Mason was convicted of casting a provisional ballot (voting).

She was sentenced to 5 yrs.” —[Bishop Talbert Swan](#)

SR-71 Blackbird

“This is the cockpit of one of the most legendary planes ever built, the SR-71 Blackbird.

The Blackbird, created by Lockheed Martin’s Skunk Works division, was a revolutionary aircraft. Described by a former pilot as “107 feet of fire-breathing titanium,” the Blackbird’s groundbreaking construction made the spy plane unique among aircraft.” —[Massimo](#)



blackboxtesting

See: basic testing

black core

noun “A communication network architecture in which user data traversing a global internet

protocol (IP) network is end-to-end encrypted at the IP layer. Related to striped core.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

BLACK data

noun “Data that is protected by encryption so that it can be transported or stored without fear of compromise. Also known as encrypted data.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSI No. 4005 (COMSEC)]

Blackfeet

7 January 2024: “speakin in a global language” —[sandy](#)

Lily Gladstone won the Best Actress award at the 2024 Golden Globes for her role in the movie Killers of the Flower Moon.

She started her acceptance speech in her native Blackfeet language, which the colonial network mislabelled out of racism and bigotry.



blacklist

noun “A hard device usually consisting of leather-enclosed metal, with a strap or spring shaft for a handle (Penal Code Section 16760)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and

Training]

black list

noun “A list of discrete entities, such as hosts or applications that have been previously determined to be associated with malicious activity.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-94]

Also known as dirty word list.

black listing

noun “The process used to identify: (i) software programs that are not authorized to execute on an information system; or (ii) prohibited universal resource locators (URL)/websites.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4]

Black Panthers

Operated free medical clinics.

Taught self-defense classes.

Fed children breakfast before school.

Delivered groceries to the elderly.

Started a free school.

Started the nutrition program for new Moms and their babies which later became WIC.

black pudding

Black pudding is a distinct regional type of blood sausage originating in the United Kingdom and Ireland. It is made from pork or occasionally beef blood, with pork fat or beef suet, and a cereal, usually oatmeal, oat groats, or barley groats. The high proportion of cereal, along with the use of certain herbs such as pennyroyal, serves to distinguish black pudding from blood sausages

eaten in other parts of the world.

Black pudding made with sheep's lungs are illegal in the U.S.

Black Pyramid

“A rare intact pyramid capstone; it is one of the few known in existence. The capstone belonged to the Black Pyramid, which was built by King Amenemhat III, c 1850-1800 BC.

The hand carving shows a solar disc with two cobras and outstretched wings (sign of protection) on each side. Below are two eyes (which refers to “seeing”) and below that is the hieroglyph for “beauty” and finally below that is the hieroglyph for the “sun disc of Ra” (the ancient Egyptian deity of the sun). Put that all together and it reads: “Seeing the beauty of Ra”.

Now we move to the left, which reads: “The Son of Ra, Amenemhat (in cartouche), given life forever.”

Now go back to the center and read right: “King of Upper and Lower Egypt, Nimaatre (in cartouche), given life forever.”

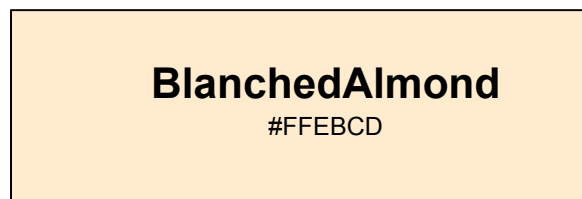
The second line reads from right to left: “May the face of the king of Upper and Lower Egypt, Nimaatre, be opened so that he may see the Lord of the Horizon (Horakhty, Horus of the Horizon) when he crosses the sky; may the Lord of the Horizon cause the Son of Ra, Amenemhat, to shine as a god, lord of eternity and indestructible.”

The third line reads from right to left: “The Lord of the Horizon has said: ‘I have given the beautiful horizon of the Two Ladies (Nebty) and Itjijautawy (He who inherited the Two Lands), so that you may unite with the horizon; the horizon has said that you rest upon it, which pleases me.’ ” ” —[Historic Vids](#)



BlanchedAlmond

keyword: HTML color name



blank

keyword: COBOL reserved word (z/OS)

blanket

Blankets were traditionally made from wool. The material is warm, even when wet, naturally fire-retardant, and allows air to circulate well.

blended attack

noun “A type of attack that combines multiple attack methods against one or more vulnerabilities.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

BLISS

abbreviation

programming language

BLKSIZE (expression)

keyword: PL/I keyword

Option of ENVIRONMENT attribute

block

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

Blockly

programming language

blond/blonde

In French, blond meant male with yellow hair and blonde meant female with yellow hair (or the hair color itself). That pair of words were common in English until recently. Now the movement is towards just having blond.

BlooP

abbreviation

programming language

Blue

keyword: HTML color name



bueprint

“The first known blueprint can be traced back to the ancient civilization of the Sumerians, who made significant advancements in architecture and urban planning.

Around 5,000 years ago, they developed a house plan featuring a central courtyard, which is considered as one of the earliest blueprints in human history. The ground plan of a residence in Umma, a Sumerian city, showcases this design and provides insight into their architectural techniques.

This blueprint served multiple purposes. It provided an open area for gathering, socializing, and conducting various household activities. Additionally, it allowed for better ventilation and natural lighting within the living spaces. The courtyard design also offered a sense of privacy, as

the surrounding walls shielded the inhabitants from the outside world.” —[Massimo](#)



Blue Team

noun “1. The group responsible for defending an enterprise’s use of information systems by maintaining its security posture against a group of mock attackers (i.e., the Red Team). Typically the Blue Team and its supporters must defend against real or simulated attacks 1) over a significant period of time, 2) in a representative operational context (e.g., as part of an operational exercise), and 3) according to rules established and monitored with the help of a neutral group refereeing the simulation or exercise (i.e., the White Team).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

noun “2. A group of individuals that conduct operational network vulnerability evaluations and provide mitigation techniques to customers who have a need for an independent technical

review of their network security posture. The Blue Team identifies security threats and risks in the operating environment, and in cooperation with the customer, analyzes the network environment and its current state of security readiness. Based on the Blue Team findings and expertise, they provide recommendations that integrate into an overall community security solution to increase the customer's cybersecurity readiness posture. Often times a Blue Team is employed by itself or prior to a Red Team employment to ensure that the customer's networks are as secure as possible before having the Red Team test the systems.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

BlueViolet

keyword: HTML color name



blur

keyword: JavaScript windows method

See:  **.bmp** — file extension

body

keyword: Ada reserved key word

keyword: VHDL reserved key word

body of evidence (BoE)

noun “The set of data that documents the information system's adherence to the security controls applied.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US

federal government]

bologna

bologna is a large Italian smoked sausage of beef, veal, and pork

baloney is foolish or deceptive talk; nonsense

bombing

7 August 2023: “No one was held accountable for the nuclear bombings of Hiroshima & Nagasaki.

Just like no one was held accountable for the bombings of Vietnam, Laos, Cambodia, Afghanistan, Iraq, Libya, Syria, Yemen, etc.

Remember this the next time the US lectures the world about human rights ” —[Sarah](#)

book

There are more than 130 million published book titles.

According to Guinness World records, the longest book in the world, at 9,609,000 characters (including spaces), is *Remembrance of Things Past*, written by Marcel Proust in 1912.

BOOL

keyword: Objective-C word

BOOL(x, y, z)

keyword: PL/I keyword

Built-in function

See: `_Bool` — C

boolean

keyword: Java reserved key word

keyword: JavaScript reserved word

Boomerang

programming language

Bosque

programming language

Boston Market

22 August 2023: “Officials in New Jersey have ordered the immediate closure of 27 Boston Market restaurants after an investigation found they didn’t pay wages to 317 employees & owed more than \$600,000 to workers.

They can reopen after paying backed wages & all fines.” —[LeftwardSwing](#); article: [Popular Chain restaurant Closing Dozens Of Stores](#)

both

keyword: SQL reserved word (z/OS)

bottom

keyword: COBOL reserved word (z/OS)

boundary

noun “Physical or logical perimeter of a system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

boundary protection

noun “Monitoring and control of communications at the external boundary of an information system to prevent and detect malicious and other unauthorized communications, through the use of boundary protection devices (e.g. gateways, routers, firewalls, guards, encrypted tunnels).” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4]

boundary protection device

noun “A device with appropriate mechanisms that: (i) facilitates the adjudication of different interconnected system security policies (e.g., controlling the flow of information into or out of an interconnected system); and/or (ii) provides information system boundary protection.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-53 Rev 4]

box tie

Gote Shibari (Box Tie): A popular upper-body tie that binds the arms behind the person's back. It's intricate and requires knowledge of safety practices.

See also: shibari

Brazil

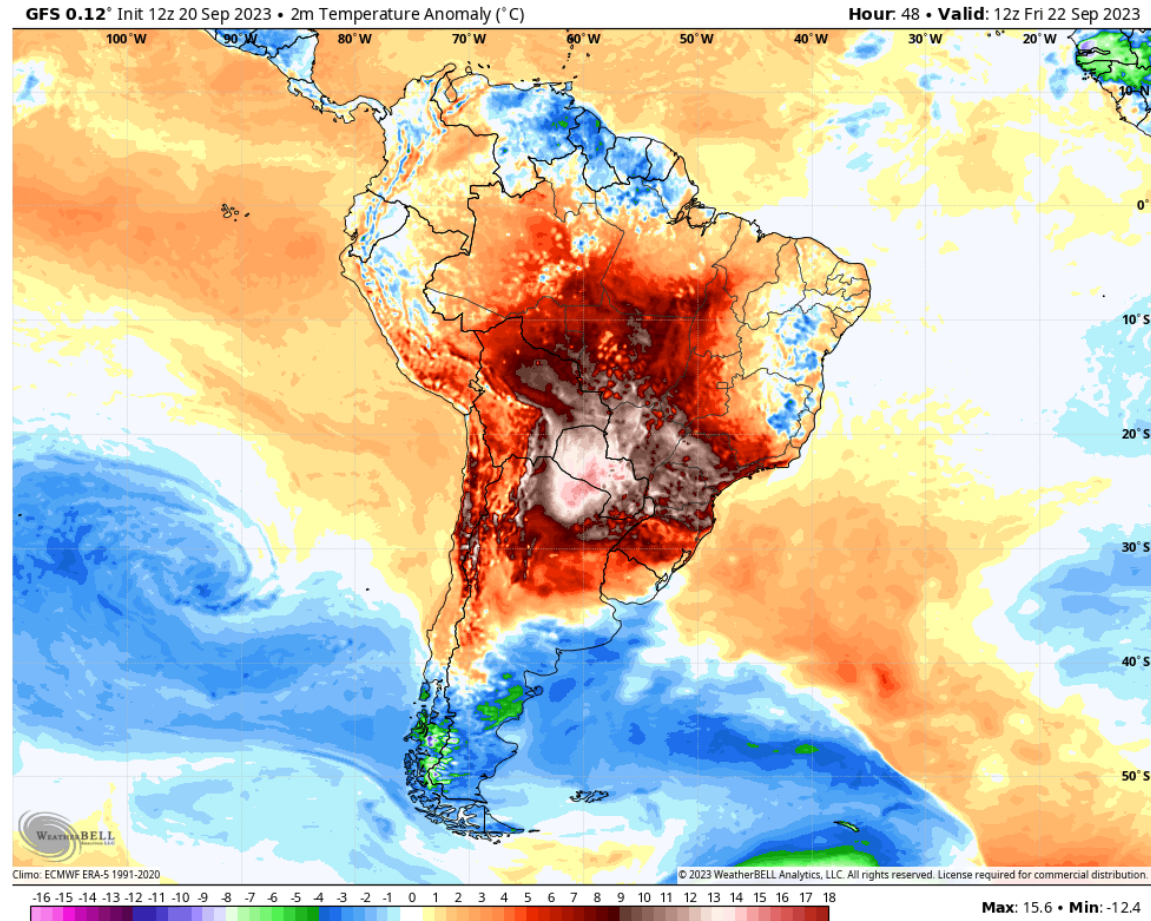
20 September 2023: “On the last day of winter in South America, temperatures could peak as high as 45°C (113°F) in Brazil.

Brazil could record its highest temperature in history during this winter heatwave.

“Heat will be so extreme that it will be dangerous and pose a risk to health and life,” @metsul.

The highest temperature ever recorded in Brazil is 44.8°C in November 2020.” —[Colin](#)

[McCarthy](#)



bread and circuses

“Give them bread and circuses and they will never revolt.” —Juvenal, early second century CE

break

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: Ruby reserved word

See: breakfast

breakfast cereal

Most U.S. breakfast cereals, including Frosted Flakes, Honey Bunches of Oats, and Rice Krispies, are banned in the European Union and Japan because they include Butylated hydroxytoluene (BHT), an artificial flavor enhancer that is carcinogenic.

BRICS

7 August 2023: “COUNTRIES THAT HAVE A DESIRE TO JOIN BRICS

Algeria

Argentina

Bangladesh

Bahrain

Belarus

Bolivia

Venezuela

Vietnam

Guinea

Greece

Honduras

Egypt

Indonesia

Iran

Cuba

Kuwait

Morocco

Mexico
 Nigeria
 UAE
 Tajikistan
 Thailand
 Tunisia
 Turkey
 Saudi Arabia
 Ethiopia” — [Russian Market](#)

21 August 2023: “The BRICS summit begins tomorrow, which will determine the fate of the dollar in the future

Tomorrow in South Africa the long-announced summit of BRICS will be attended by all its permanent members Brazil, Russia, India, China and South Africa, as well as 40 other countries, including a large number that are waiting to be admitted to this organization .

It has long been announced by politicians of these countries that BRICS is working on its own currency for international trade that will destroy the dominance of the dollar as a world reserve currency.

The US is using this situation of the dollar as the world's reserve currency, as a weapon against disobedient countries and has imposed sanctions on them, preventing those countries from using the dollar in world trade and thus plunging them into economic crisis and misery.

This condition of the dollar also allowed the United States to print large amounts of unbacked dollars and release them into international use. This means that the world works for the US while it only prints dollars for them.

Current world dollar reserves are 58% and continuing to fall as US foreign debt continues to rise.

If BRICS comes out with a new currency like this, this will be a huge blow to the dollar and the US economy. The US will no longer be able to afford the luxury of printing without cover, and the external debt will continue to grow.

If this plan fails due to India's insecurity, the Chinese Yuan is well on its way to taking over that role.

The *Financial Times* reports that China plans to turn the BRICS into a geopolitical rival to the G7.

This article is completely wrong.

BRICS countries have already surpassed the G7 and together contribute nearly 31.5% of the global GDP, compared to 30.7% by G7 countries. And these are only the founding BRICS countries, without those that have applied and are waiting for their acceptance into the organization, such as Iran, Saudi Arabia, Indonesia, Venezuela, etc., a total of 15.

Another thing is that it is not China that controls BRICS, but all members are equal, unlike the G7, which all members obey the United States.

If Saudi Arabia is admitted, keep in mind that the petro-dollar is ending which will be the most painful blow to the dollar.

With all these countries, BRICS will manage the majority of the world's resources, including oil, gas, lithium, gallium and many other very important materials needed for advanced

technology.

BRICS was not that active and did not have any bright future before the war in Ukraine. Biden and his administration can claim another success in destroying American hegemony in the world.” —[Megatron](#)

24 August 2023: “New composition of BRICS will control 80% of world oil production

With the addition of Saudi Arabia, the United Arab Emirates and Iran to the BRICS, the Union will be able to control the lion’s share of the world’s oil production.

The same goes for the sharp GDP growth of the new BRICS countries. It will amount to 30% of world GDP and exceed \$30 trillion.” —[Sprnter](#)



24 August 2023: BRICS admitted Saudi Arabia, Iran, Ethiopia, Egypt, Argentina, and the United Arab Emirates.

25 August 2023: “BREAKING: Barely 24 hours from the just concluded 15th Annual BRICS Summit, Brazil has proposed the Chinese Yuan as Trade Guarantee to Argentina as the dollar’s influence declines drastically in that country. So, in order to reduce the trade risks associated with the dollar, all exports headed towards Argentina from Brazil will be conducted with the

Chinese Yuan amidst Argentina's acute dollar shortage.

At the same time, Vladimir Putin has also just announced BRICS games 2024 and invited all BRICS member states to the epochal event that'll be the first since admitting six more countries into the bloc. Extending invitation, Putin said "Russia will be happy to welcome BRICS athletes during the 2024 Games of the Future, which will feature hybrid disciplines in both traditional sports and popular video games." The sporting event is slated for June 12-24, 2024.

In the west's sanction war on RUSSIA since the start of the RUSSIA-Ukraine war, Russian sportsmen and women haven't been spared. They have been publicly humiliated and altogether banned from nearly all global sporting events whilst whilst seizing the opportunity of such events to celebrate/glorify Ukraine and promote their course in that country. With the new face BRICS vis BRICS + Six and a dozen plus other countries on the wait list, Russian sports personnel may no longer be needing western sports establishment, from the look of things. What happens in 2024 at the BRICS games in Kazan will set the tone for where the future of sports in our world lies - in the hands of those who would deploy sports as a weapon of choice against their opponents or those who will separate politics from sports, obey the rule of law and respect peoples right to personal opinions.

As the BRICS summit got underway, the legacy media and their talking heads could swear that BRICS was not ever gonna be able to admit any new member, because according to them, BRICS was too weak, too divided to forge any more alliance past where they were before the summit. When the big announcement came, the shock on their faces was legendary. With all the pessimistic vibes they tried to give out, it now appears the BRICS nation are even running faster than many had anticipated. Just that they managed to find a crazy way to keep it all quiet and just show up with actions - something I believe the west and their media goons are still scratching their heads to comprehend.

Welcome again, to the multipolar world!" —[J.C. Okechukwu](#)

26 August 2023: "On the final day of BRICS Summit, Pres. Maduro of Venezuela calls for the de-dollarization of the global economy to stop its use "as a mechanism of economic warfare."

He pointed out that 30 nations - with 2.2 billion people - live in sanctioned countries." —[BreakThrough News](#) [includes video]

holding breath

Dolphins can hold their breath for about 10 minutes, while sloths 9with a slower heart rate) can hold their breath for about 40 minutes.

bridgeOS

operating system

Proprietary embedded operating system by Apple.

Brief Code

programming language

year created: 1949

created by: John Mauchly and William F. Schmitt

predecessors: ENIAC Short Code

brk

function: C library function: stands for BReaK location

broccoli

Broccoli is generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

botanical information:

Botanical name: *Brassica oleracea italica* (Italica Cultivar Group of species *Brassica oleracea*)

Common name: broccoli, brocks, calabrese, Italian asparagus, Italian broccoli

French name: brocoli

Family: Brassicaceae (cabbage); formerly Cruciferae family

origin:

Origin: Mediterranean and Asia Minor; especially Italy.

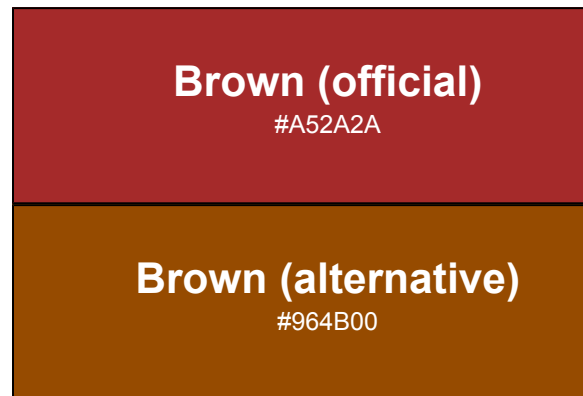
history:

History: Broccoli was considered a valuable food in the Roman Empire (especially in the Italian peninsula)

See: broccoli (nutritional information)

Brown

keyword: HTML color name



See: brown rice

browsing

noun “Act of searching through information system storage or active content to locate or acquire information, without necessarily knowing the existence or format of information being sought.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

Brussels sprouts

Brussels sprouts are generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

buck breaking

9 July 2023: “Buck Breaking—The Use of Sexual Violence Against Enslaved Men as Punishment for Wrongdoing. Reports suggest the massive popularity of the practice of buck breaking may have been utilized as an outlet for homosexual slaveowners to act out their sexual desires on men, without attracting the stigma associated with being gay.” —[Kenny Akers](#)



Buckingham Palace

6 January 2024: “Buckingham Palace is the official residence and administrative headquarters of the monarch of the United Kingdom. The original building, the center of the palace, was a large townhouse known as Buckingham House, built for the first Duke of Buckingham in 1703. It became a royal possession when King George III purchased the house in 1761 as a private residence for Queen Charlotte. In the 19th century, the structure was enlarged to become a palace. Queen Victoria was the first sovereign to make the palace her residence in July 1837 and, in June 1838, she was the first British monarch to leave from Buckingham Palace for a coronation. Over the years, Buckingham Palace expanded further to its current 775 rooms that include 19 state rooms, 52 royal and guest bedrooms, 188 staff bedrooms, 92 offices, and 78 bathrooms. Buckingham Palace measures 108 m long (354 ft) across the front, 120 m deep (393 ft) (including the central quadrangle), and 24 m (78ft) high and is a focal point for the British people during national rejoicing and mourning.” —CIA World Factbook (material that expires after 30 days)



See: BUF — PL/I

Buffalo Bills

29 March 2022: “New York is giving the Buffalo Bills \$850 million in taxpayer funds for a new stadium, the biggest pro sports subsidy of all time. [\$600 million from New York State and \$250 million from Erie County for construction costs]

Three days ago, NY announced a \$800 million cut to children and family services.

The Bills owner is worth \$5.8 billion.” —[Dan Price](#)

buffer

keyword: VHDL reserved key word

BUFFERED

keyword: PL/I keyword

Abbreviated: BUF

Attribute

buffer overflow

noun “A condition at an interface under which more input can be placed into a buffer or data holding area than the capacity allocated, overwriting other information. Attackers exploit such a condition to crash a system or to insert specially crafted code that allows them to gain control of the system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSI No. 1011; NIST SP 800-28]

BUFFERS (n)

keyword: PL/I keyword

Option of ENVIRONMENT attribute

BUFFND (n)

keyword: PL/I keyword

Option of ENVIRONMENT attribute

BUFNI (n)

keyword: PL/I keyword

Option of ENVIRONMENT attribute

BUFFOFF

keyword: PL/I keyword

Option of ENVIRONMENT attribute

BUILTIN

keyword: PL/I keyword

Attribute

bulk encryption

noun “Simultaneous encryption of all channels of a multi-channel telecommunications link.”

[from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

bumblebee bat

The smallest mammal in the world is the bumblebee bat, weighing between 0.05 and 0.07 ounces, length 1.14 to 1.29 inches, and wingspan of 5.1 to 5.7 inches.

The *Craseonycteris thonglongyai* is also known as the Kitti's hog-nosed bat.

bureaucracy

“BUREAUCRACY — Government by department, rule being through the heads of the various departments and conducted by their chief administrators.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

Burkina Faso

12 August 2023: “IRAN has offered military assistance to MALI and BURKINA FASO” —[Jackson Hinkle](#)

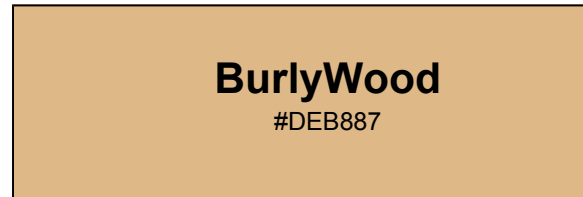
12 August 2023: “Burkina Faso has TERMINATED their Non-Double Taxation Treaty with France since 1967.” —[Africa Archives](#)

15 August 2023: “Burkina Faso terminates tax exemption agreement with France.

Burkina Faso’s Interim leader Ibrahim Traoré has scrapped a tax exemption deal with France that previously allowed French companies to make profits in the West African country without paying taxes to the government.” —[MintPress News](#)

BurlyWood

keyword: HTML color name



Burroughs MCP

abbreviation

operating system

Proprietary OS by Burroughs Corporation.

bus

keyword: VHDL reserved key word

business continuity plan (BCP)

noun “The documentation of a predetermined set of instructions or procedures that describe how an organization’s mission/business processes will be sustained during and after a significant disruption.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-34 Rev 1]

business impact anaylsis (BIA)

noun “An analysis of an information system’s requirements, functions, and interdependencies used to characterize system contingency requirements and priorities in the event of a significant disruption.” [from Committe on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-34 Rev 1]

button

keyword: JavaScript windows object

buybacks

22 July 2023: “Prior to Reagan, stock buybacks, offshoring capital and tax havens were all illegal in the United States, it was even enforced, today these techniques are weaponized by the ruling class to steal trillions of dollars away from the general population each year.” —[MC Squared](#)

by

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

BY

keyword: PL/I keyword

Option of DO statement

Byblos

Byblos, Lebanon, is about 7,000 years old.

bycopy

keyword: Objective-C former reserved word

See: **BYNAME** — **PL/I**

BY NAME

keyword: PL/I keyword

Abbreviated: BYNAME

Option of assignment statement

byref

keyword: Objective-C former reserved word

byte

keyword: Java reserved key word

keyword: JavaScript reserved word

C c

C

ASCII: 43 hex

UNICODE: LATIN CAPITAL LETTER C

c

ASCII: 63 hex

UNICODE: LATIN SMALL LETTER C

C (x[,y])

keyword: PL/I keyword

Format item

cabbage

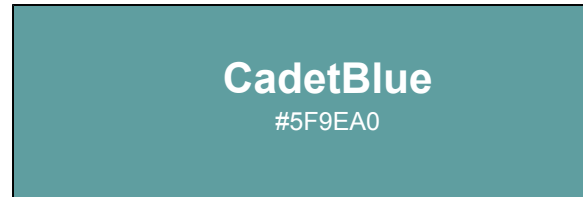
Cabbage is generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

cache

keyword: SQL reserved word (z/OS)

CadetBlue

keyword: HTML color name



Cádiz

Cádiz, Spain, is about 3,100 years old.

caged children

17 August 2023: “No trained child abuse professionals have been permitted to investigate the condition of children that are held in ICE detention sites. Physical, sexual and psychological abuse as well as physical and medical neglect has been reported for years. No one is checking on these kids.

Most of my career has been spent in victims services, child abuse being a big part of that. Every child in the US, citizen or not, documented or not, falls under the jurisdiction of local child protection services. Except children in ICE detention. Why??” —[Professor Anthony Zenkus](#)

calcium

the chemical element of atomic number 20, a soft gray metal.

Calcium is a soft gray alkaline earth metal and is the fifth most abundant element in the Earth's crust.

Name: calcium

Symbol: Ca

Atomic Number: 20

Periodic Table: Group (or family) 2 (old European IUPAC system group IIA; old American CAS system group IIA), alkaline earth metals; Period 4; s-block

Atomic mass: 40.078(4) g/mol

See: calcium (nutritional information)

Caldera DR-DOS 7.02 and higher

operating system

Proprietary OS by Digital Research, Inc.

Derived from DR-DOS 3.31-6.0 — [Wikipedia: List of operating systems](#)

DOS
DR-DOS

Caldera OpenDOS 7.01

operating system

Proprietary OS by Digital Research, Inc.

Derived from DR-DOS 3.31-6.0 — [Wikipedia: List of operating systems](#)

DOS
DR-DOS

California coast

22 August 2023: “An intense marine heatwave has arrived along the Northern and Central

California coast, with water temperatures up to 7°F above normal.

A buoy near the Golden Gate reported a water temperature of 68°F today, 7°F above normal.

If warm waters persist, there could be significant impacts on marine life and coastal ecosystems while also making for muggier conditions near the coast.” —[Colin McCarthy](#)

call

keyword: SQL reserved word (z/OS)

keyword: VHDL reserved key word

CALL

keyword: PL/I keyword

Statement

CALL

keyword: PL/I keyword

Option of INITIAL attribute

callable

keyword: PHP reserved word

call back

noun “Procedure for identifying and authenticating a remote information system terminal, whereby the host system disconnects the terminal and reestablishes contact.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

calloc

function: C library function: stands for Character memory ALLOCation

Cameroon

30 August 2023: “When Paul Biya became president of Cameroon in 1982, Emmanuel Macron was five years old. Today, Paul Biya is still president and France still supports him.”
—[Adémólá](#)

Camouflaging firearm container

noun “A device not readily recognizable as containing a firearm but designed and intended to enclose a firearm; it allows the firing of the firearm by external controls while the firearm is in the container (Penal Code Section 16320)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

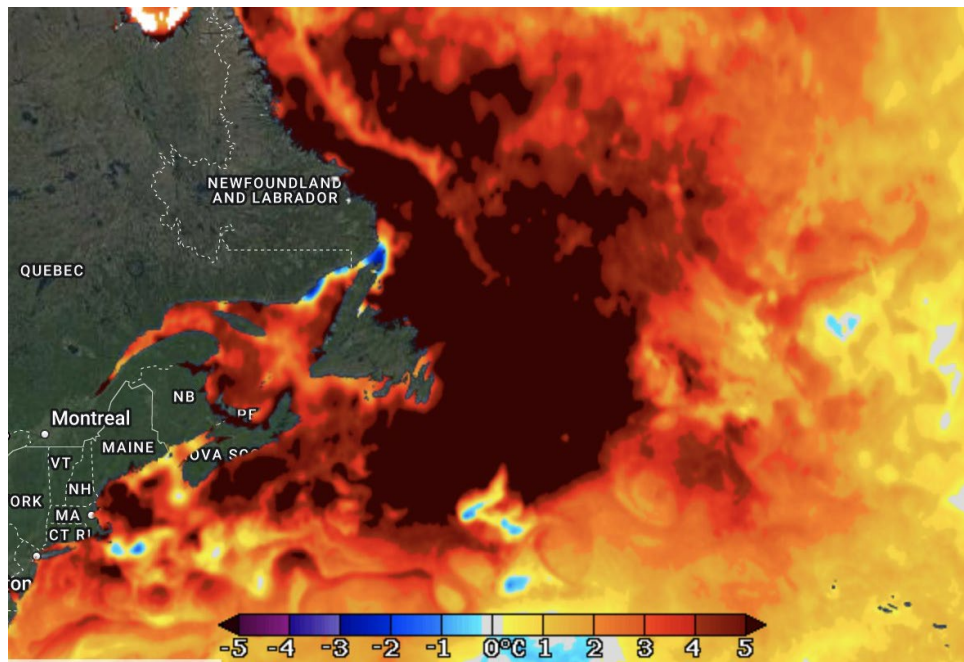
camper

noun “A structure designed to be mounted upon a motor vehicle and to provide facilities for human habitation or camping purposes (Vehicle Code Section 243)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Canada

25 July 2023: “An extraordinary marine heatwave has developed off the east coast of Canada, with hundreds of thousands of square miles of ocean experiencing sea surface temperatures more than 5°C (9°F) above normal and max anomalies approaching 10°C (18°F) above normal.

Thermal stress from this marine heatwave could have major impacts on marine life in the Northwest Atlantic.” —[Colin McCarthy](#)



USS Canberra

26 July 2023: “A new US warship has been ushered into service in Sydney. The ship is called the USS Canberra to honor the military union of the United States and Australia, and, if that’s still too subtle for you, it has a literal star-spangled kangaroo affixed to its side.



That's right: the first US warship ever commissioned in a foreign port has been emblazoned with a kangaroo covered in the stars and stripes of the United States flag. An Australian officer will reportedly always be part of the staff of the ship, to further symbolize the holy matrimony between Australia and the US war machine.

"I can think of no better symbol of this shared future than the USS Canberra," gushed US ambassador to Australia Caroline Kennedy. "Built by American workers at an Australian company in Mobile, Alabama, her crew will always include a Royal Australian Navy sailor, and from today forward, she will proudly display a star-spangled kangaroo."

And you know what? She's right. Not because of her giddy joy over the complete absorption of Australia into the US military apparatus of course — that's a horrifying nightmare which is increasingly putting this nation on track toward a frontline role in Washington's war plans against China. But she's right that the star-spangled kangaroo and the ship which carries it is a perfect symbol for the way these two nations have become inseparably intertwined.

In fact, I'd take it a step further. I'd say the star-spangled kangaroo should be the new symbol for our entire nation.

I mean, we might as well, right? Australia is not a sovereign nation in any meaningful way; we're functionally a US military/intelligence asset, and according to our defence minister Richard Marles our own military is being moved "beyond interoperability to interchangeability" with the US war machine so they can "operate seamlessly together, at speed."

The US imprisons Australian journalist Julian Assange for exposing US war crimes like he's

the personal property of the Pentagon, and when the US doesn't like our Prime Minister because he's too keen on Australian independence or perceived as too friendly with China, they simply replace him with another one.

We even found out not long ago that Australians are not given permission to know if the US is bringing nuclear weapons into this country. That is a secret the US keeps from all of us, and our government respects their privacy on the matter.

So I think the star-spangled kangaroo is an entirely appropriate symbol for this country. Put it on our flag. Put it on our money. Put it on all our warships and planes, and on every military uniform. When you walk into an Australian government building, Yankarooey (or whatever stupid Aussie nickname we make up for the thing to mask our own cognitive dissonance) should be the first thing everyone sees.

Undignified? Certainly. Humiliating? Absolutely. An admission that Australia is not a real nation? Of course.

But at least it would be honest. If we're going to act like Washington's subservient basement gimp, we may as well dress the part." —[Caitlin Johnstone](#)

cancel

keyword: COBOL reserved word (z/OS)

cane gun

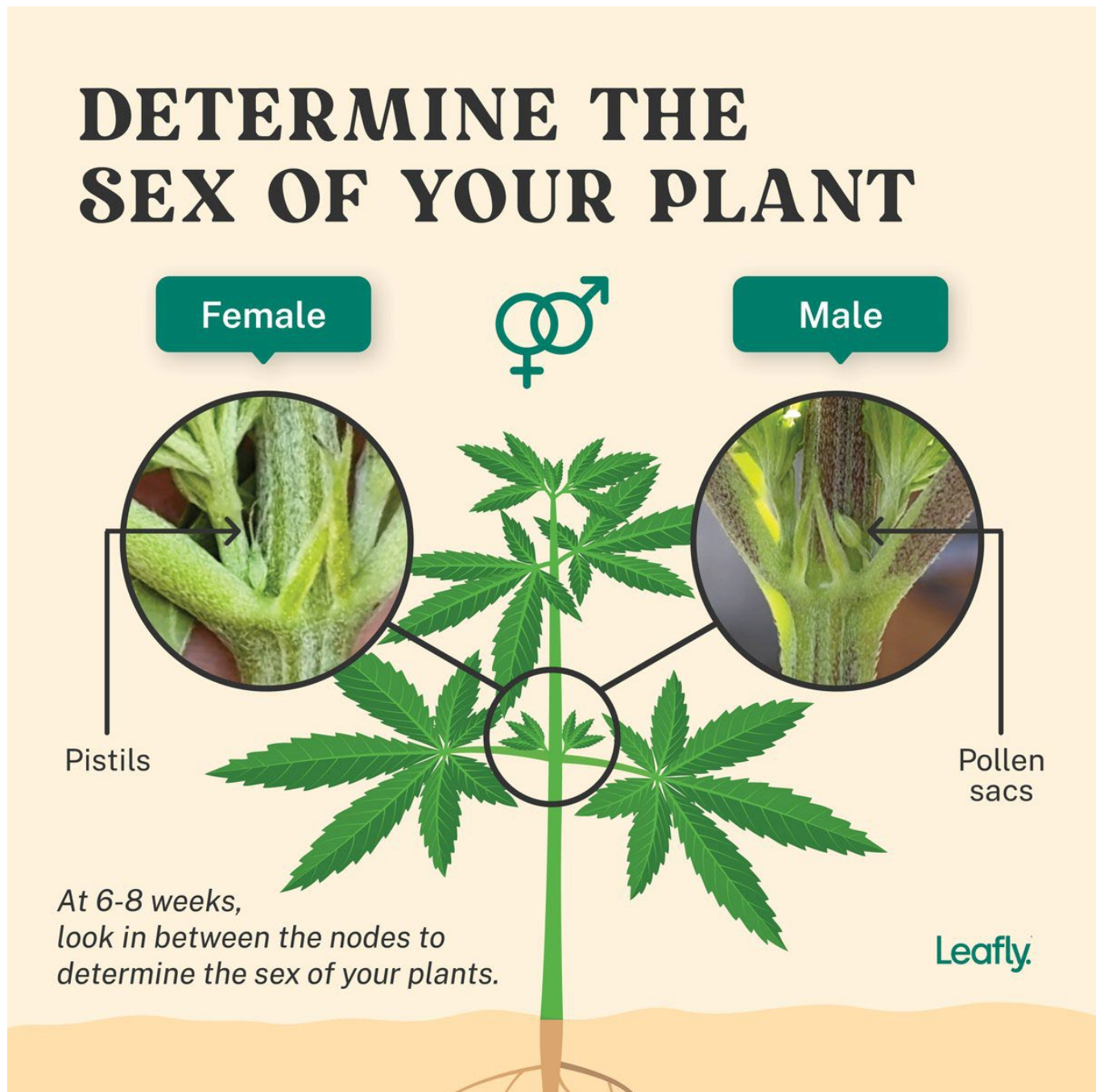
noun “A firearm mounted or enclosed in a stick, staff, rod, crutch, or similar device designed to be, or capable of being, used as a walking aid (Penal Code Section 16330)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

cane sword

noun “A cane, swagger stick, stick, staff, rod, pole, umbrella, or similar device having concealed within it a blade that may be used as a sword or stiletto (Penal Code Section 16340)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

cannabis

19 March 2023: “Only female plants produce bud. Here’s how to identify male plants that could be lurking in your grow” —[Leafly](#): [guide](#)



28 August 2023: “Biden Admin is like this:
go on tv for big announcement: “mass pardon for everyone federally convicted marijuana possession”

all the newspapers put it on front page

cable news talks all week

the catch? nobody was in federal prison for marijuana possession = nobody to release ” —[Gio](#)

[DeBatta](#)

Last week President Joe Biden announced the largest act of clemency in a generation: a mass pardon for people convicted of federal marijuana possession.

As far as bold acts of mass clemency go, it won't lead to many people getting out of prison. In fact, it will lead to none.

According to the White House and a report this week from the U.S. Sentencing Commission (USSC) there is no one currently in federal custody for simple possession of marijuana.

canned fish

Canned or tinned fish are food fish which have been processed, sealed in an airtight container such as a sealed tin can, and subjected to heat.

Cape Verde

13 August 2023: "BREAKING: ECOWAS member state, Cape Verde opposes military intervention in Niger.

According to the country's president, Jose Maria Neves, "We all should work to restore constitutional order in Niger but in no way through a military intervention or an armed conflict at this point. We should actively engage in talks and resolve issues diplomatically because any military intervention will make the situation worse, turning the region into an explosive zone," Agence France-Presse quoted him as saying.

Meanwhile, a meeting of defence chiefs of ECOWAS member nations scheduled to hold in Accra, Ghana, yesterday, Saturday, August 12, to concretize the planned troops deployment for military intervention in Niger Republic, was unexpectedly called off. Reason being that member nations are divided on the need for such an intervention at this time.

Cape Verde joins the ranks of Sierra Leone, Ghana, Liberia and Togo who earlier on declined to take position on the proposed military intervention in Niger. This explains why the proposed Accra, Ghana meeting of ECOWAS military chiefs eventually failed to hold.

Not sure if it's a coincidence, but all these institutional resistance to military intervention became more evident and grew louder shortly after RUSSIA openly warned against military intervention in Niger. Beyond that, Africans have been up in arms against the rushed decision and the campaign against it has been robust and simply overwhelming, both online and on-site.

Interestingly, some 94 French lawmakers have blasted President Emmanuel Macron in an open letter following the Niger coup. They warned that France was at the risk of being squeezed out of Africa by global powers like Russia, China, etc. They urged Macron to rethink France's Africa policy as it had failed to win over cooperation from the Africans.

Bottomline, the voice of the people of AFRICA is being heard loud and clear, more than at any other time in history. Enough is enough! The time for Africa's freedom is now and it's not negotiable. Never ever give up on mama. Viva AFRICA!" —[J.C. Okechukwu](#)

capitalism

"Governments in capitalist society are but committees of the rich to manage the affairs of the capitalist class." —James Connolly

"Capitalism is the extraordinary belief that the nastiest of men, for the nastiest of motives, will somehow work for the benefit of us all." —John Maynard Keynes

"While there's capitalism, there'll be socialism, because there is always a response to injustice," —Ed Miliband

13 August 2023: "The question I am asked so often: Ayisha how can we solve the climate crisis, what is the best solution?

The answer I want to say in the most blunt way possible: end capitalism. Transition away from market based exploitive economies. It's not working.

It devours everything, from protest to rebellion, from ecological and nature based solutions to the health of living beings. It's the biggest lie we are being sold that we can transition into a sustainable world under capitalist driven systems.

Even renewable energies under capitalism are harmful. We can probably in the short term change more easily from fossil energy to renewable- but in the end we will sacrifice more human life.

People often throw around the phrase “Indigenous/ local communities are at the frontlines of the climate crisis” and leave out indigenous people suffer perhaps the most direct consequences of capitalism. We know what it means to be forced into poverty after being rich in resources

It's also why, I'd argue awareness of food systems, biodiversity, resources being exploited is so darn scary for corporate powers. It's not the renewable transition they fear, it's the peoples realization that these things belong to us, for free, that we deserve them—as basic human rights. You can't be sold what you are already entitled to.” —[Ayisha Siddiq](#)

8 January 2024: “Socialism is the fire department saving your house. Capitalism is the insurance company denying your claim.” —[DrLearnALot](#)

cardinailty

keyword: SQL reserved word (z/OS)

George Carlin

“Traditional American values: Genocide, aggression, conformity, emotional repression, hypocrisy, and the worship of comfort and consumer goods.” —George Carlin

“Governments don't want well informed, well educated people capable of critical thinking. That is against their interests.

They want obedient workers, people who are just smart enough to run the machines and do the paperwork. And just dumb enough to passively accept it.” —George Carlin

“Sooner or later, the people in this country are going to realize the government doesn't give a fuck about them. The government doesn't care about you, or your children, or your rights, or your welfare and safety. It simply doesn't give a fuck about you. It's interested in its own power. That's the only thing. Keeping it, and expanding it wherever possible.” —George Carlin

“[Politicians] don't want a population of citizens capable of critical thinking. They don't want well informed, well educated people capable of critical thinking. They're not interested in that. That doesn't help them.” —George Carlin

“Never underestimate the power of stupid people in large groups.” —George Carlin

“Rights aren't “rights” if someone can take them away. They're privileges. That's all we've

ever had in this country: a bill of temporary privileges. And if you read the news, even badly, you know that the list gets shorter and shorter.” —George Carlin

“The Christians are coming to get you, and they are not pleasant people.” —George Carlin

Stokely Carmichael

“What a liberal really wants is to bring about change that will no in any way endanger his position.” —Stokely Carmichael

carnivore

“Carnivores include cats and lions and tigers, dogs and wolves, polar bears, and other meat eaters.” —[Groups of Mammals](#)

carrot

Carrots are generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

George Washington Carver

“George Washington Carver had a difficult start in life. Born sometime around 1864, his father died shortly before George’s birth, likely from an accident when he was out hauling wood. And only weeks after birth, slave traders kidnapped George and his mother. Rescued would not be an apt term; recovered is more appropriate. But the group sent out to find him and his mother exchanged a horse for the young boy. His mother, however, was lost to the traders. Less than two months old, and George was already an orphan.

Often sick, frail, he was not expected to live. But live he did, and from a young age, he showed much devotion to work and a desire for learning. He was curious, and as he’d roam the woods near the Carver home, exploring flowers, trees, rocks, and birds, he began asking questions about their purpose.

While much of his education early on was self-motivated, he began formal schooling at ten. He learned of a school about eight miles from the Carver home. And without any money or a new home, he left the Carver’s to attend this school, living in an old barn while doing odd jobs to

earn money to survive. Eventually, he was adopted into a family there.

Education for George would continue through completing a Master's Degree in agriculture from Iowa State University in 1896. After which, he took a job as Head of the Agricultural Department at the Tuskegee Institute in Alabama.

George was also an artist. At the age of 30, Carver gained acceptance to Simpson College in Indianola, Iowa, where he was the first Black student. Carver studied piano and art.

As an agricultural scientist and inventor, his goal was to help farmers improve their lives by earning more from their crops. He found hundreds of uses through his research of peanuts in particular and other products such as sweet potatoes and pecans. His work was instrumental and impactful. Between 1915 and 1918, acreage for peanut cultivation grew from half a million to over four million acres.

After George passed away in 1943, Franklin D. Roosevelt sent a message that said: “ All mankind are the beneficiaries of his discoveries in the field of agricultural chemistry. The things which he achieved in the face of early handicaps will for all time afford an inspiring example to youth everywhere.” ” —[African & Black History](#)

case

keyword: Ada reserved key word

keyword: C keyword

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (z/OS)

cast

keyword: SQL reserved word (z/OS)

Fidel Castro

“Homeland or death! Socialism or death! We shall overcome!” —Fidel Castro

“They talk about the failure of socialism but where is the success of capitalism in Africa, Asia and Latin America?” —Fidel Castro

cat

“Cats place each hind paw directly in the print of the corresponding fore paw, minimizing noise and visible tracks.” —[Massimo](#) [link includes a short video]

The cat is digitigrade. It walks on the toes, with the bones of the feet making up the lower part of the visible leg. Unlike most mammals, it uses a “pacing” gait and moves both legs on one side of the body before the legs on the other side. It registers directly by placing each hind paw close to the track of the corresponding fore paw, minimizing noise and visible tracks. This also provides sure footing for hind paws when navigating rough terrain. As it speeds up from walking to trotting, its gait changes to a “diagonal” gait: The diagonally opposite hind and fore legs move simultaneously.—[Wikipedi](#)

“people don’t realize how integral to the advancement of humanity cats are. they, at the beginning of the agricultural revolution protected the crops from wildlife and predators and made sure we had a full supply of food so we could focus on technological advancement.” —[baredex](#)

13 December 2023“Outdoor house cats have a wider-ranging diet than any other predator on Earth.” —[Massimo](#)

12 December 2023“Free-ranging cats (*Felis catus*) are globally distributed invasive carnivores that markedly impact biodiversity. Here, to evaluate the potential threat of cats, we develop a comprehensive global assessment of species consumed by cats. We identify 2,084 species eaten by cats, of which 347 (16.65%) are of conservation concern. Islands contain threefold more species of conservation concern eaten by cats than continents do. Birds, reptiles, and mammals constitute ~90% of species consumed, with insects and amphibians being less frequent. Approximately 9% of known birds, 6% of known mammals, and 4% of known reptile species are identified in cat diets. 97% of species consumed are <5?kg in adult body mass, though much larger species are also eaten. The species accumulation curves are not asymptotic, indicating that our estimates are conservative. Our results demonstrate that cats are extreme generalist predators, which is critical for understanding their impact on ecological systems and developing management solutions.” — from paper at [Nature](#)

Catalan

19 March 2023: “A Catalan delegation has been in Sahrawi refugee camps in Algeria to demand more aid for Western Sahara, a disputed territory claimed by Morocco

“This should have been resolved 32 years ago with a referendum on self-determination” ”
—[Catalan News](#); tweet includes a video

catch

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

See: `@catch()` — Objective C

caterpillar

“The caterpillar does all the work, but the butterfly gets all the publicity.” —George Carlin

cauliflower

Cauliflower is generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

CB Unix

abbreviation

operating system

Proprietary OS by Bell Labs.

A version of UNIX Time-Sharing System v6. — [Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v6

cbl

keyword: COBOL reserved word (z/OS)

CCI Multiuser DOS

abbreviation

operating system

Proprietary OS by Digital Research, Inc.


DOS


CCW (carry concealed weapon) license


noun “License issued by the chief law enforcement officer of the local law enforcement agency authorizing a person to carry a concealed weapon (Penal Code Section 26150)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

cd

keyword: COBOL reserved word (z/OS)

See: **.cda**  — **file extension**

See: `.cdr`  — file extension

See: `.cdt`  — file extension

ceil

function: C math.h library function: stands for CEILing of a number

CEIL(x)

keyword: PL/I keyword

Built-in function

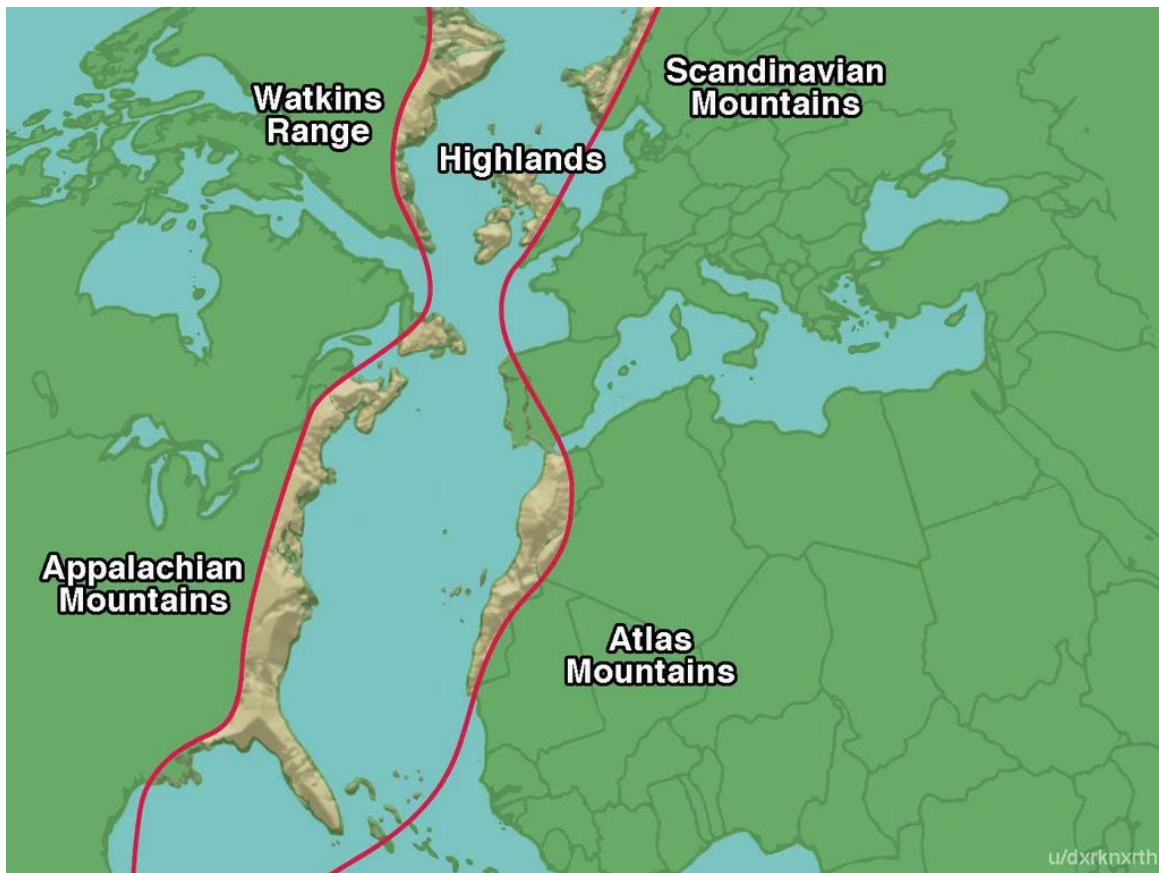
censorship

19 March 2023: “A prolific American user of TikTok (LukeDavidJohnson) urges skepticism about the stated motives for why the US Security State and both parties are so eager to ban the app, one that 100 million Americans voluntarily choose to use. Even if you support the ban, it’s worth hearing.” — [Glenn Greenwald](#); tweet includes a video

19 March 2023: “Here’s Part 2. ACLU’s argument for why a USG ban on TikTok violates the 1Am is it denies to Americans the ability to communicate on an app the USG doesn’t control (as he says, the same reason they hate New Twitter). Not everything done in the name of anti-China sentiment is wise:” — [Glenn Greenwald](#); tweet includes a video

Central Pangean Mountains

“One pretty cool geological fun fact is that the Appalachian Mountains, the Atlas Mountains, the Scottish Highlands, the Watkins Range and Scandinavian Mountains were all once part of the same mountain range, the Central Pangean Mountains” — [Massimo](#)



“The Central Pangean Mountains were formed as a result of a collision between the supercontinents Laurussia and Gondwana during the formation of Pangaea.

It was similar to the present Himalayas at its highest elevation during the beginning of the Permian period.” —[Raviranjan Kumar](#)

“During the Permian period, the Central Pangean Mountains underwent physical weathering and their size decreased. By the beginning of the Jurassic period, the Pangean chain in Western Europe disappeared, leaving behind highland regions separated by marine basins.” —[Raviranjan Kumar](#)

breakfast cereal

Breakfast cereal will cause a spike in your blood sugar.

cf

keyword: COBOL reserved word (z/OS)

CFA

14 August 2023: “CFA Franc explained:

To control a country's money is to control its destiny. Without monetary sovereignty, there is no way to have economic sovereignty. Without economic sovereignty, there is no way to have political sovereignty. And that is precisely what France set out to do via the CFA Franc.

CFA Franc was first introduced by Charles De Gaulle, and is currently used by 14 nations in North Africa (Roughly 200 Million people). Originally, ‘CFA’ stood for “Colonial French Africa”, but as the image of colonialism became increasingly frowned upon, the acronym was later changed to “Financial Community of Africa”. Nonetheless, changing the acronym did nothing to change the underlying mechanics of how the the CFA Franc functioned.

The CFA Franc is tied to France's currency, at a fixed rate. This means that when the CFA Franc fluctuates in value at the exact same rate that the Euro does. French central bank retains the right to print, circulate and regulate all CFA Franc bills. CFA Franc nations don't even get to control their own interest rates. They are completely set by France. So in periods of economic turmoil, African nations are virtually powerless to set any monetary reforms needed for recovery.

At face value, this might initially seem to have its benefits, because being tied to a stable currency, such as the Euro, offers a degree of financial security and inflation protection. However, in practice, it makes export dependent growth extremely difficult. In order for a country to break out of poverty, it needs export-driven growth and its own monetary independence.

The CFA Franc is fixed to the Euro, which results in domestic goods becoming less price competitive whenever the Euro appreciates against other currencies, especially the US dollar, the global reserve currency. This has resulted in domestic industries never having taken off within these African countries. As a consequence, virtually every CFA Franc nation has seen a Real GDP DECREASE from their 1970s levels. Decreasing Real GDP, followed by a stagnated export economy, has resulted in economic ruin for the people of the CFA Franc Nations. The Ivory Coast's real GDP has decreased over 30% since 1978. Cameroon and the Republic of Congo have seen similar dips.

A more nefarious element of the CFA Franc is that Franc requires 50% of participating countries' foreign reserves to be stored with the French central bank. In addition, France require 20% additional deposits for liabilities.

This does two things. It extracts much needed wealth out of Africa, and into France. It makes the French economy look stronger on paper, and increases their government bond rating, at the expense of Africa.

Depriving Africa of their own wealth has caused underdevelopment in these countries. The problem of underdevelopment was further compounded by the fact that Africa no longer became a reliable place to store investments. This caused CFA member countries to see Billions in wealth leave their already-impooverished country and go to Europe, America and abroad. Since 1979, the Ivory Coast saw \$40B leave the country in capital flight. The same story applies to other member nations. Capital Flight accounts for a very tiny percentage of money leaving the country, however, that relatively minor amount alone could have reduced African poverty by 55% had it

remained within their respective countries.

To add insult to injury, France makes it incredibly difficult for CFA member states to access THEIR OWN MONEY stored in French banks. The CDA Franc charter states that 50% of foreign reserves must be stored in French central banks, with an additional 20% stored for liability.

If a member country wants access to their own money, they must do it in the form of a loan, which must be paid back, INCLUDING INTEREST AND COMMISSION. Yes... France charges African countries INTEREST IN ORDER TO ACCESS THEIR OWN MONEY. To add insult to injury, France will only grant access to that money if the countries's financial documents look stable enough...which they usually never do, because the CFA Franc system is designed such that there is little to no financial strength.” —[Apollo](#)

C.F.D.

noun “Candidates for Deletion (C.F.D.) A term labeled “C.F.D.” may be obsolete; however without the term, rationale and possible linkage to a new term, users of the glossary would have no indication the term is outdated or has been replaced by a new term.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

cfree

function: C library function: stands for Character memory FREE

ch

keyword: COBOL reserved word (z/OS)

Chad

4 August 2023: “ Chad rejects Niger coup intervention

Chad will not intervene in a coup in neighbouring Niger, the country's defence minister Daoud Yaya Brahim has said.

He made his remarks on state television on Friday, just as West Africa's regional bloc, ECOWAS, said it has devised a possible plan to reinstate ousted President Mohamed Bazoum.

In other words, Chad acknowledges the current government and will not invade to oust it. Earlier in a statement, the government of Chad iterated that they would respect the wishes of the people of Niger.” —[DD Geopolitics](#)

Chandrayaan-3

23 August 2023: India became the fourth nation to land on the Moon (after the US, Soviet Union, and China) at 6:04 pm in India on 23 August 2023. The Chandrayaan-3 landed near the Moon's south pole and released a rover. Russia's Luna 25 also intended to land near the Moon's south pole spun into an uncontrolled orbit and crashed 20 August 2023.

2 September 2023: “Chandrayaan-3 Mission: The Rover completed its assignments.

It is now safely parked and set into Sleep mode.

APXS and LIBS payloads are turned off.

Data from these payloads is transmitted to the Earth via the Lander.

Currently, the battery is fully charged.

The solar panel is oriented to receive the light at the next sunrise expected on September 22, 2023.

The receiver is kept on.

Hoping for a successful awakening for another set of assignments!

Else, it will forever stay there as India's lunar ambassador.” —[Indian Space Research Organization](#)

channel pressure

keyword: MIDI comamnd

Dn hex (where n is the channel number)

1 paraaemter

paramater: pressure

William Ellery Channing

“We look forward to the time when the power to love will replace the love of power. Then will our world know the blessings of peace.” —William Ellery Channing

Ralph Chaplin

“It seems the most logical thing in the world to believe that the natural resources of the Earth, upon which the race depends for food, clothing and shelter, should be owned collectively by the race instead of being the private property of a few social parasites.” —Ralph Chaplin

char

keyword: C keyword: data type

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

See: **CHAR** — PL/I

CHAR(expression [size])

keyword: PL/I keyword

Built-in function

character

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

CHARACTER [(length)]

keyword: PL/I keyword

Abbreviated: CHAR

Attribute

characters

keyword: COBOL reserved word (z/OS)

char_length

keyword: SQL reserved word (z/OS)

char_length_b

keyword: SQL reserved word (z/OS)

char_length_mb

keyword: SQL reserved word (z/OS)

character_length

keyword: SQL reserved word (z/OS)

character_length_b

keyword: SQL reserved word (z/OS)

character_length_mb

keyword: SQL reserved word (z/OS)

Chartreuse

keyword: HTML color name



Hugo Chavez

“It’s ironic that those who till the soil, cultivate and harvest the fruits, vegetables, and other foods that fill your tables with abundance have nothing left for themselves.” —Hugo Chavez

“Privatization is a neoliberal and imperialist plan. Health can’t be privatized because it is a fundamental human right, nor can education, water, electricity and other public services. They can’t be surrendered to private capital that denies the people their rights.” —Hugo Chavez

check

keyword: PL/C keyword

Statement as in `CHECK (15, 20) ;`

keyword: SQL reserved word (ANSI, Oracle, z/OS)

CHECK [(name list)]

keyword: PL/I keyword

Condition

CHECK

keyword: PL/I keyword

Statement

checkbox

keyword: JavaScript windows object

See: cheese

Cherokee

21 September 2023: “Leaders of the #FiveTribes passed a resolution expressing no confidence in Wes Nofire or the position of Native American Liaison within Governor Stitt’s administration.

The Inter-Tribal Council leaders voted during a special session Thursday.” —[Cherokee Nation](#)

INTER-TRIBAL COUNCIL OF THE
FIVE CIVILIZED TRIBES
 CHEROKEE - CHICKASAW - CHOCTAW - CREEK - SEMINOLE



September 21, 2023

**Leaders of the Five Tribes pass a resolution of no confidence
 in Wes Nofire or the position of Native American Liaison
 within Oklahoma Governor Stitt's administration**

“Wes Nofire cannot be an effective advocate for tribes in Oklahoma or act as a bridge between the governor and tribes when he clearly echoes the same anti-tribal rhetoric as the governor. Governor Stitt has proven to be opposed to tribal sovereignty. He has appointed Wes Nofire to simply parrot his views opposing tribes not only as independent sovereigns, but as valued partners in strengthening the state. We can only conclude that Wes Nofire will continue to oppose tribal sovereignty under Governor Stitt's direction. Therefore, we do not have confidence that he can fulfill the role as Native American Liaison.”

Cherokee Nation Principal Chief Chuck Hoskin Jr.

Chickasaw Nation Governor Bill Anoatubby

Choctaw Nation Chief Gary Batton

Muscogee (Creek) Nation Principal Chief David W. Hill

Seminole Nation Chief Lewis J. Johnson

A Resolution expressing no confidence in Wes Nofire or the position of Native American Liaison within Governor Stitt's Administration

Resolution No. 23-



Chuck Hoskin Jr.
Principal Chief



Bill Anoatubby
Governor



Gary Bolton
Chief



David W. Hill
Principal Chief



Lewis J. Johnson
Chief

WHEREAS, the Inter-Tribal Council of the Five Civilized Tribes (ITC) is an organization that unites the tribal governments of the Cherokee, Chickasaw, Choctaw, Muscogee (Creek) and Seminole Nations, representing approximately 815,000 Indian people throughout the United States; and

WHEREAS, under Oklahoma Law, the Governor can appoint a Native American Liaison responsible for monitoring state/tribal compacts, tribal consultation policies, and ensuring consistent outreach and relationship-building with tribes; and

WHEREAS, Governor Stitt's record of hostility against tribal sovereignty includes seeking the termination of state / tribal gaming compacts, refusing to negotiate in good faith on a renewal of the state / tribal hunting and fishing compacts, criticizing the historic McGirt decision, seeking to have the McGirt decision reversed or undermined in subsequent court cases, supporting the exclusion of Tulsa and other municipal governments from the scope of the McGirt decision, and that the assertion of tribal sovereignty by Tribes in Oklahoma was a "storm of injustice"; and

WHEREAS, Wes Nofire aligns with Governor Stitt's views on tribal sovereignty and the position of Native American Liaison is ineffective under Governor Stitt's leadership; and

NOW THEREFORE LET IT BE RESOLVED THAT, the Inter-Tribal Council of the Five Civilized Tribes does not support Wes Nofire and the role of Native American Liaison in Governor Stitt's Administration until the Governor ceases his challenges to tribal sovereignty and engages in a constructive dialogue with Tribes to advance the best interests of all Oklahomans.

CERTIFICATION

The foregoing resolution was adopted by the Inter-Tribal Council of the Five Civilized Tribes meeting virtually on this 21st day of September 2023 by a vote of 20 for 0 against and 0 abstentions.

19 December 2023: "Principal Chief @ChuckHoskin_Jr issues a statement after the U.S. Senate confirms former Cherokee Nation Attorney General Sara Hill as the first female Native American federal district judge in Oklahoma." — [Cherokee Nation](#)



December 19, 2023

Chief Hoskin issues statement after the U.S. Senate confirms former AG Sara Hill as the first female Native American federal district judge in Oklahoma

“Today, on a bipartisan basis, the United States Senate made history, confirming former Cherokee Nation Attorney General Sara Hill as the first female Native American Oklahoma federal district judge.

Sara Hill earned bipartisan support, and support from an array of thoughtful individuals and organizations across the country, for the same reason Cherokee leaders placed so much confidence in her: She is a brilliant attorney with a commitment to public service, fairness, justice and the rule of law.

I am especially appreciative of the support offered by Oklahoma Senators James Lankford and Markwayne Mullin, who worked with the Biden administration to confirm Sara Hill. Oklahoma Attorney General Gentner Drummond’s support was also so impactful and appreciated. In supporting Sara Hill, as well as fellow pending nominee John Russell, Senators Lankford and Mullin placed our collective interest in improving access to justice in Oklahoma federal courts over genuine partisan divisions with the president on other matters. By the same token, President Biden deserves praise for his history-making nomination of Sara Hill. I am also gratified that the Senate was largely unmoved by the small collection of special interest opponents of Sara Hill’s nomination, inexplicably led by Governor Kevin Stitt and the Oklahoma cockfighting industry.

Today is a great and historic day for the country for which we should all pause to celebrate.”

Cherokee Nation Principal Chief Chuck Hoskin Jr.

cherry

August 2023: Most of Oregon’s cherry crop was lost to climate change.

chewing gum

Chewing gum dates back to pre-written history, in both Europe and the Americas.

chicken

The US's chicken is banned by the European Union since 1997 because of its chlorine wash. The EU says that health standards should be used throughout the chickens' lives rather than a insufficient wash just at the end.

Chickens on factory farms in the US are fed specific balanced pelleted rations of corn (for energy), soybean (for protein), or another grain-based feed, vitamin and mineral supplements, and regular doses of antibiotics.

child deaths

14 December 2023: "I will never get used to Israel supporters saying things like "Fuck around and find out" and "That's what you get" in response to news of civilians being killed in Gaza. I just cannot understand the kind of mind that thinks that's a sane way to respond to children being murdered." —[Caitlin Johnstone](#)

child hunger

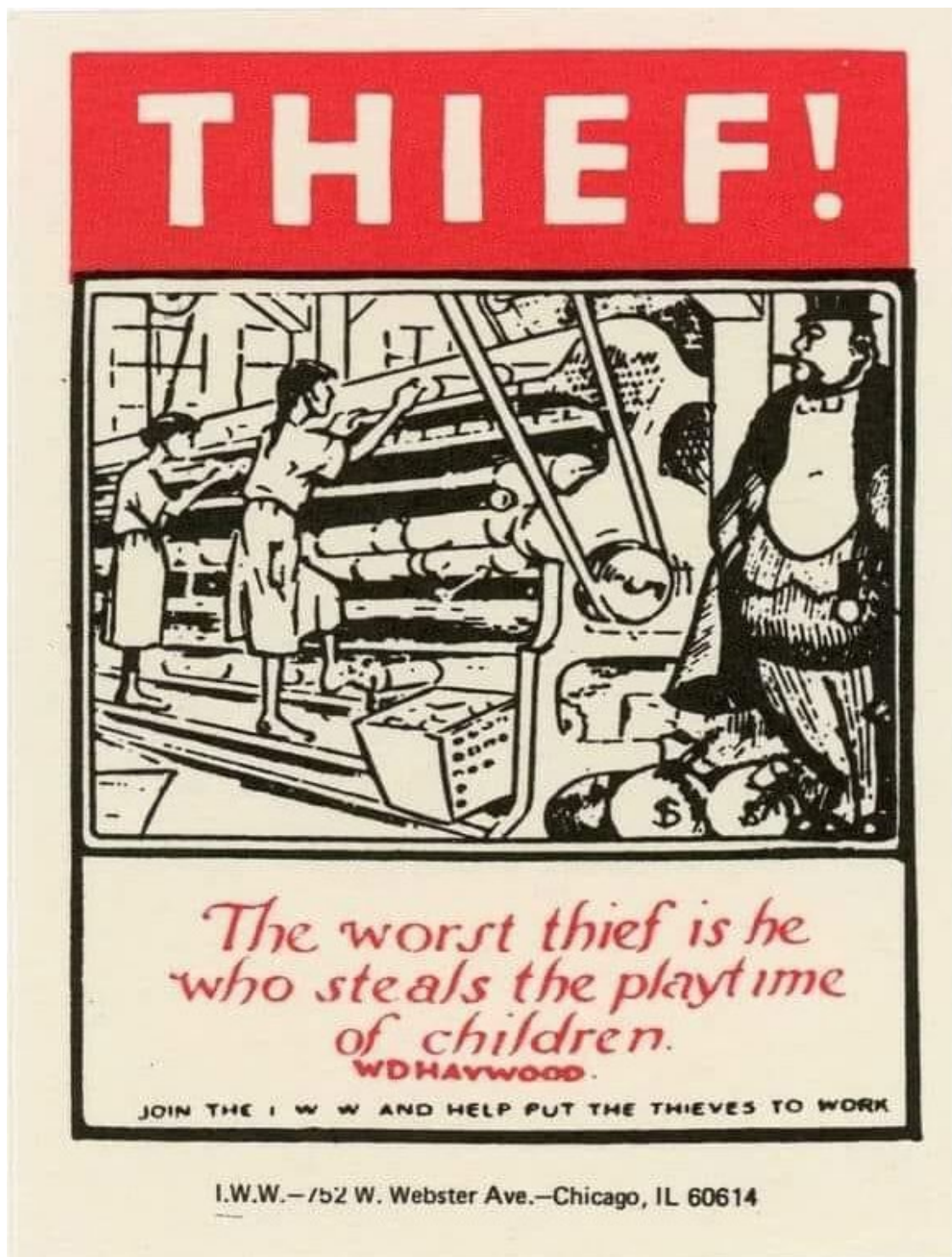
21 November 2023: "The next time you wonder why there are hungry children in classrooms remember that we give the Pentagon over \$2,000,000,000 every single day." —[Public Citizen](#)

child labor

28 May 2023: "Corporations are repeating history. During the "Asylum boom" and "orphan movement" at the turn of the last century, hundreds of thousands were institutionalized. Their children were used to work factories and sold into indentured servitude. Now, in this modern "gilded era" of mass wealth inequality, similar to that of the industrial revolution, states are aiming to legalize child labor once again. Children from the "orphan train movement" were taken

to the West, adopted, or sold to corporations and families with an indentured servitude contract. This is one reason many of our grandparents and great-grandparents don't know their lineage. The poor, the ill, the addicted, and those who challenged the state could find themselves institutionalized with little to no protections. Their children were taken. And even baby farming happening in these institutions. From legalized child labor, migrant abuse, rolling back safety nets, rampant wealth inequalities, unchecked corporate hegemony, a broken healthcare system, gig-work and no benefits, and rampant housing issues, history is repeating itself.” —[Zen Day](#)

16 December 2023: “This is a reminder of how ALL the billionaires got their billions -- they took it from slave and child labor.” —[Red Ironheart](#)



child rights

29 August 2023: “Climate change is real. There is no question in my mind about it. The only question is how quickly it will progress.

Today, 18 jurists from the United Nations came to the conclusion that children can sue their countries over climate change under the “Convention on the Rights of the Child” treaty.” —[brian krassenstein](#)

child sex abuse material

9 August 2023: “Twitter Exec Defends Restoring Account That Shared Child Sex Abuse Material

Executives at X, the company formerly known as Twitter, testified in front of an Australian Parliament hearing late Wednesday, and defended the restoration of an X account after it shared child sexual abuse material in late July. The incident attracted widespread attention because X owner Elon Musk personally intervened to reinstate the account after a violation that would normally result in a permanent ban from the social media platform.

Nick Pickles, the head of global government affairs at X, was asked about the incident by an Australian senator late Wednesday ET, early Thursday Australian local time, after Pickles first suggested there was a zero tolerance policy for child sex abuse material before seeming to contradict himself. Pickles said the offending account in question may have been sharing the content “out of outrage.”

“One of the challenges we see is, for example, people sharing this content out of outrage because they want to raise awareness of an issue and see something in the media,” Pickles testified, according to an audio livestream.

“So if there are circumstances where someone shares content but, under review, we decide the appropriate remediation is to remove the content but not the user,” Pickles continued.

There’s nothing in the X terms of service that says it’s okay to share child sexual abuse material if a user is doing it because they’re outraged over the images or looking to “raise awareness.” It’s generally understood that sharing child sex abuse materials, regardless of intent, is not only a federal crime in the U.S. and Australia, but re-victimizes the child.

The offending account is operated by a right-wing influencer who has previously insisted he was just sharing a news article, a claim that’s been disputed by journalists on X who point out the influencer watermarked the material he shared. The abuse material was reportedly one of the worst images ever created, showing a toddler being tortured, according to the *Washington Post*.

“When it was pointed out that this account, which had more than half a million followers, had tweeted an image containing child sexual abuse material—some of the most notorious and appalling child sexual abuse material—your boss, tweeted that the account had been suspended, the material had been deleted, but then after pressure from his followers, your boss Elon Musk, reinstated the account,” Australian senator David Shoebridge said during the hearing.

Shoebridge suggested there was a purely financial motivation for Musk to reinstate the account, a characterization with which Pickles disagreed.

The Australian government hearing, first reported by the Guardian, grew heated after Pickles insisted X has made tackling child abuse material a priority since Musk bought the company in October 2022. Musk’s mass layoffs actually gutted the Child Safety Team, according to multiple reports.

Australian senator Helen Polley pointed to research that child sexual abuse material had become more common since Musk bought the company. Polley questioned why child sexual

abuse material wouldn't result in an immediate ban on X since it was a crime, regardless of intent.

"There is no excuse, whether you're posting something through outrage, which to me just is not logical, that your account should not be permanently suspended," Polley said.

Management of X has been a hot-button issue in Australia since Musk bought the platform in late 2022. And Australian parliamentary hearings tend to be more harsh on U.S.-based technology executives as a rule, but senators were particularly aghast at the answers they were getting from Pickles on Wednesday. Pickles repeatedly said that X's general policy is permanent suspension for sharing child sex abuse material, but in some instances it can take repeated violations, a contradiction that senators pointed out.

"You can see why we don't have a lot of faith and trust in what you're saying here today," Senator Polley told Pickles." —[Forbes](#) [behind a pay wall]

China

"We need a larger Navy to contain China. The overmatch with China is real." —Senator Lindsey Graham

11 August 2023: "China is responsible for the production of about 90 per cent of the world's rare earth elements, at least 80 per cent of all the stages of making solar panels and 60 per cent of wind turbines and electric-car batteries." —[Snowflake](#): article: [How China cornered the market for clean tech](#)

14 August 2023: "Message from the Chinese propaganda department: As part of our campaign to inspire Americans to MAGA, we've added more "Incredible Women in China" to TikTok, following the huge success of the Ukrainian Chinese Housewife's recent video." —[Keawe Wong](#) [with video]

15 October 2023: "Israel's reaction went beyond self-defense and the collective punishment of the residents of the Gaza Strip should stop." —Chinese Foreign Ministry

19 October 2023: "China: invests one trillion in the Belt and Road Initiative helping 150 countries around the world build better infrastructure.

The U.S.: invests billions in the genocidal Israeli terrorist state and trillions in endless war. But sure, tell me how bad China is again!" —[Danny Haiphong](#)

16 November 2023: "BREAKING: China says Biden calling Xi Jinping a dictator is 'extremely wrong and political manipulation' " —[The Spectator Index](#)

Chinese Exclusion Act of 1882

The Chinese Exclusion Act of 1882 forbid Chinese immigrants entering the US, blocked any Chinese already in the US from becoming US citizens, and ordered the deportation of all Chinese people who arrived after 1880.

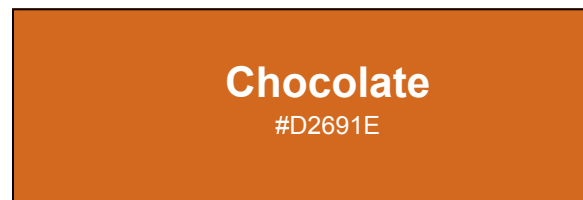
Chippewa Operating System (COS)

operating system

Proprietary OS by Control Data Corporation.

Chocolate

keyword: HTML color name



Chocolate Hills

23 December 2023: “The unusual geological formation known as the Chocolate Hills in Bohol, Philippines, consists of almost 1,300 perfectly cone-shaped hills. The hills, all about the same size, spread over some 50 sq km (19 sq mi), and in the dry season the grass turns brown, giving the hills their name.” —CIA World Factbook (material that expires after 30 days)



chords

16 September 2023: “chord cheat sheet” — [Solar Heavy](#)



15 November 2023: “chord cheat sheet” — [Solar Heavy](#)



chorus

26 December 2023: “Chorus: Adds a thicker, richer sound by duplicating the original signal and altering the pitch and timing of the duplicate.” —[Nathaniel W.](#)

Christianity

Chrome OS

operating system

Proprietary OS by Google

Chrome OS is designed to work exclusively with web applications. Announced on July 7, 2009, Chrome OS is currently publicly available and was released summer 2011. The Chrome OS source code was released on November 19, 2009, under the BSD license as Chromium OS.

—[Wikipedia: List of operating systems](#)

chromium

the chemical element of atomic number 24, a hard white metal used in stainless steel and other alloys.

scientific information:

Chromium is a steel-gray, lustrous, hard metal.

Name: chromium

Symbol: Cr

Atomic Number: 24

Periodic Table: Group (or family) 6 (old European IUPAC system group VIA; old American CAS system group VIB); Period 4; d-block

Atomic mass: 51.9961(6) g/mol

See: [chromium \(nutritional information\)](#)

Chromium OS

operating system

Proprietary OS by Google

Chromium OS is an open source operating system development version of Chrome OS. Both operating systems are based on the Linux kernel. —[Wikipedia: List of operating systems](#)

CIA

This is a CIA pamphlet on how to disrupt organizing efforts:

General Interference with Organizations and Production

(1) Insist on doing everything through "channels." Never permit short-cuts to be taken in order to expedite decisions.

(2) Make "speeches." Talk as frequently as possible and at great length. Illustrate your "points" by long anecdotes and accounts of personal experiences. Never hesitate to make a few appropriate "patriotic" comments.

(3) When possible, refer all matters to committees, for "further study and consideration." Attempt to make the committees as large as possible — never less than five.

(4) Bring up irrelevant issues as frequently as possible.

(5) Haggle over precise wordings of communications, minutes, resolutions.

(6) Refer back to matters decided upon at the last meeting and attempt to re-open the question of the advisability of that decision.

(7) Advocate "caution." Be "reasonable" and urge your fellow-conferes to be "reasonable" and avoid haste which might result in embarrassments or difficulties later on.

(8) Be worried about the propriety of any decision — raise the question of whether such action as is contemplated lies within the jurisdiction of the group or whether it might conflict with the policy of some higher echelon.

cinnamon

an aromatic spice made from the peeled, dried, and rolled bark of a Southeast Asian tree.

See: cinnamon information

Cinderella

Cinderella is among the oldest works of fiction (ancient mythology not being counted as part of fiction).

In the Grimm Brothers version, Cinderella plants a hazel tree at her mother's grave site. She cries under the tree and a white dove comforts her.

The white dove provides the dress and slippers to the three night ball. The first night providing silk slippers, the second glass slippers, and the third gold slippers.

Cinderella's oldest step-sister cuts off her toes to fit into the slipper, but the dove points this out to the prince.

Cinderella's other step-sister cuts off her heel to fit into the slipper, but the dove points this out to the prince.

Cinderella fits the shoe and marries the prince.

At the wedding the dove pecks out the eyes of Cinderella's step sisters.

cis

The prefix "cis-" comes from Latin, meaning "on this side", contrasted with "trans-" which is Latin for "on the other side of".



21 June 2023: “Repeated, targeted harassment against any account will cause the harassing accounts to receive, at minimum, temporary suspensions.

The words “cis” or “cisgender” are considered slurs on this platform.” —[Elon Musk](#)

21 June 2023: “Free speech warrior doesn’t understand slurs.” —[Ron Placone](#)

James Clapper



James Clapper (a the time, head of NSA) was asked “Does the NSA collect *any type of data at all* on millions or hundreds of millions of Americans?” He replied under oath “No, sir.”

class

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Class (initial cap) Objective-C word

keyword: PHP reserved word

keyword: Ruby reserved word

See: `@class` — Objective C

See: `_CLASS_` — PHP

classic Mac OS

operating system

Proprietary OS by Apple for the Apple Macintosh.

Apple Macintosh

class-id

keyword: COBOL reserved word (z/OS)

James Clear

J“*You do not rise* to the level of your goals. You *fall* to the level of your systems.” —James Clear, *Atomic Habits*, page 27, 2018

clearerr

function: C stdio.h library function: stands for CLEAR file ERRor

clearInterval

keyword: JavaScript windows method

clearTimeout

keyword: JavaScript windows method

clientInformation

keyword: JavaScript windows object

climate change

19 March 2023: “BREAKING: scientists set to release major synthesis report as a final warning to peak total global emissions via immediate changes to political and economic systems within 650 days at the very latest as near-term climate chaos looms

1. Will the IPCC make clear tomorrow that emissions must peak before 2025 to avoid not just 1.5°C but also 2°C and 2.5°C?
2. Will it be made clear that extinction experts urge the immediate abolition of perpetual economic growth echoing the 2021 joint report by the IPBES and IPCC which suggests an end to GDP growth policies?” —[Ben See](#)

19 March 2023: “Mexico built a #solar farm to power 1.3 million homes setting a world record by installing 18,990 #solarpanels in a single day. We have solutions to the #climatecrisis. The only thing missing is the political will to implement them” —[Mike Hudema](#)

20 July 2023: “Even the fossil fuel industry knows climate change is undeniable. So it’s gone from denying it outright to delaying action by promoting methane gas as clean energy, hyping dirty hydrogen, pushing carbon capture, and staging anti electrification campaigns.

instead of outright climate denial, the new fossil fuel industry strategy is delaying action on climate change through confusing greenwashing tactics.” —[Earthjustice](#): article: [For Big Oil and Gas, Greenwashing is the New Climate Denial](#)



23 July 2023 (in response to Vice President Kamala Harris's claim "The climate crisis is not some distant future. June was the hottest month on record. It is clear: We must act urgently to address this crisis."): "They "acted urgently" by opening up 740 million acres of federal land for new oil drilling." —[benigma2017](#) and "He essentially sold the gulf coast to oil companies. Such a champion." —[Matt 'The Anti-Facist Gardener'](#)

25 July 2023: "Fish are dying by the thousands bc the oceans are too hot to hold oxygen, people are dropping dead bc of heat stroke, forever chemicals are everywhere, many polar ice caps are nonexistent, and it's the hottest summer on record, but next year will be even hotter." —[MC Squared](#)

25 July 2023: "The Gulf Stream system could collapse as soon as 2025, a new study suggests. The shutting down of the vital ocean currents, called the Atlantic Meridional Overturning Circulation (AMOC) by scientists, would bring catastrophic climate impacts.

AMOC was already known to be at its weakest in 1,600 years owing to global heating and researchers spotted warning signs of a tipping point in 2021.

The new analysis estimates a timescale for the collapse of between 2025 and 2095, with a central estimate of 2050, if global carbon emissions are not reduced." —[Geoff McFarlan](#)

25 July 2023: "7 of the hottest days in the past 100,000 years just happened. The waters off Florida are over 100F - completely unprecedented. Sea ice melting. Ecosystems collapsing. Air unbreathable due to gargantuan forest fires. **Who do we blame for this? Here's a fun list!**

1) The Fossil Fuel Companies: Of course

2) Big Ag: one of the largest causes of climate crisis yet barely even spoken about

3) The USA: Powered by the petro-dollar, the US has done everything possible to make sure fossil fuel use increases globally every single year even as the planet burns

4) The Dems & GOP: The GOP for trying to get everyone to believe climate crisis isn't happening. The Dems for admitting it's happening but ultimately doing absolutely nothing about it (because they're equally owned by Big Oil, Big Ag, & Big Banks)

5) The Mainstream Media: Even though the so-called "liberal" outlets have covered climate change for the past couple decades, they have done it exceedingly rarely. Just a couple years ago it was found NBC's "Meet The Press" mentioned climate change just twice in the entire year. Even when climate change is mentioned, it's spoken about as a vague inexplicable issue, like aging or volcanoes.

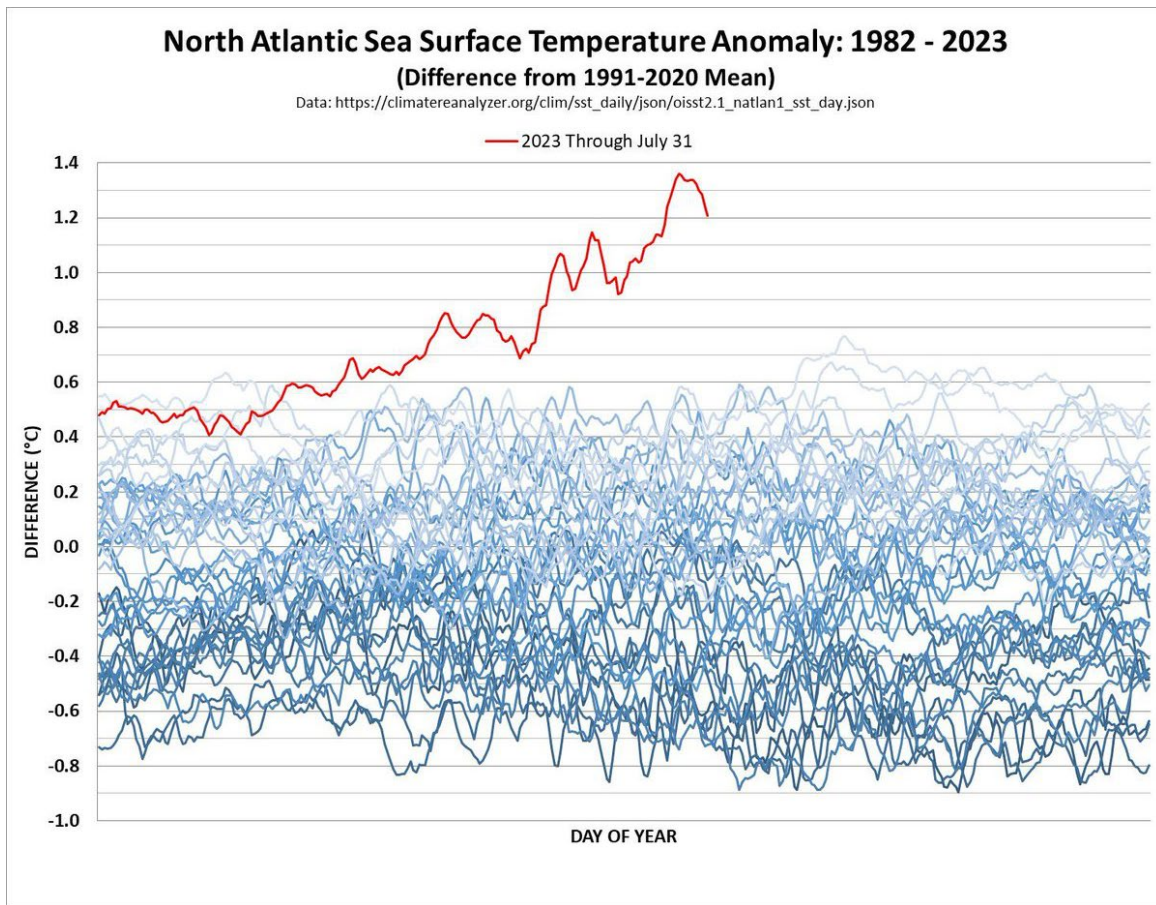
6) Capitalism: The economic plan of infinite growth on a planet with limited resources had to eventually reach a breaking point just as cancer grows until it kills the host. This breaking point could have come in several different areas - it just seems that greenhouse gases have caused the worst quickest breakdown of the lot.

7) Ryan Seacrest: Just cuz" —[Lee Camp \[Redacted\]](#)

29 July 2023: "Hypothetically, 100 000 scientists around the world say we MUST reduce emissions to Net Zero in 1 year or the Earth will become uninhabitable for humans in 5 years. All the top scientists in the world speak with 1 voice. Would humanity listen?

Please convince me?" —[Geoff McFarlan](#)

3 August 2023: “This is actually frightening” —[Sophia Kianni](#)



3 August 2023: “Earth just had its hottest month humans have ever directly measured and likely the hottest in over 120,000 years.

July 2023 was a staggering 0.33°C (0.60°F) warmer than the 2nd warmest month on record and becomes the first month to breach 1.5°C above preindustrial levels (1850-1900).

Countless heat records were broken in July across the planet as intense heat domes pushed temperatures to unprecedented levels.

In Asia, China registered its highest temperature in the country's recorded history at 126°F (52.2°C), while in Iran, the heat index reached 152°F (66.7°C), near the limits of human survival.

All-time highs were broken in Southern Europe as temperatures soared to 118.8°F (48.2°C) in Sardinia during a brutally prolonged heatwave that brought water temperatures in the Mediterranean to the highest on record.

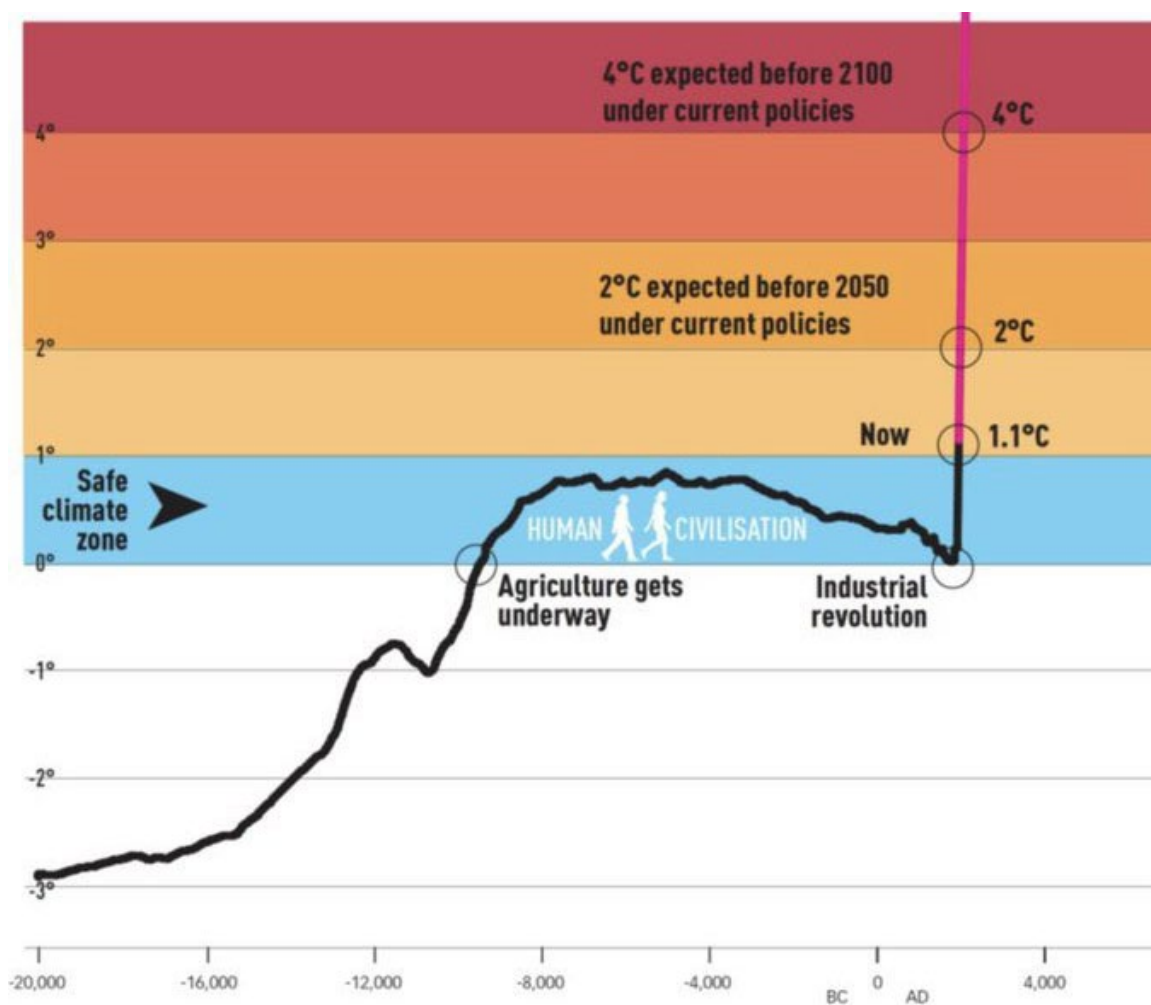
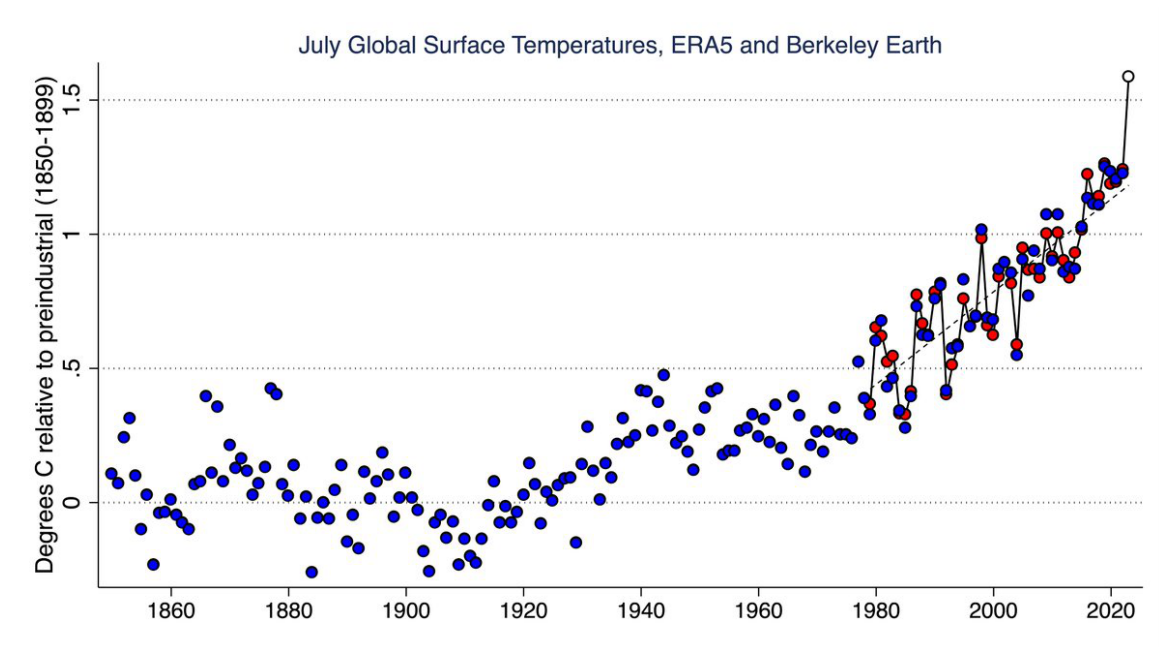
The same heat dome brought record temperatures to Northern Africa as Tunis, Tunisia, recorded its highest temperature in recorded history of 120.2°F (49°C). These hot, dry conditions also sparked deadly wildfires killing at least 34 in Algeria and 3 in Sicily.

North America also saw too many heat records to count. Most notably, Phoenix saw the hottest month of any US city on record, while Death Valley recorded a midnight temperature of 120°F (49°C) degrees, by far the warmest midnight temperature ever recorded.

A combination of a robust El Niño and climate change were likely the biggest factors in why July was so hot.

July 2023 was just a small window into the future of what our world may look like under

climate change.” —[Colin McCarthy](#)



—[Climate Dad](#) 12 August 2023

19 August 2023: “Clearly the rich believe their wealth will shield them from climate change.

The rich are gravely mistaken.” —[Geoff McFarlan](#)

19 August 2023: “Maui, USA burned to the ground.

Kelowna, Canada is now burning.

Florida ocean water are boiling.

Los Angeles hurricanes crashing.

Greenland’s ice sheet is collapsing.

China's rivers are drying up.

Europe is on fire...

And you still believe that, climate change is a hoax.” —[Mohamad Safa](#)

20 August 2023: “I used to think a sufficiently large black swan event would wake people up to the reality of the climate crisis. Lahaina just burned down and people blame space lasers, arson, grass mismanagement and climate activists. So basically, we are likely going extinct.”

—[Geoff McFarlan](#)

21 August 2023: Joe Biden’s campaign speech was mostly about his own personal life. He spent a bunch of time talking about when his first wife died and then barely mentioned that people died in Lahaina. And he made up a lie about one of his four mansions having supposedly burned down. On 2 August 2004 lightning struck the home of then Senator Joe Biden, starting a small fire that was contained to the kitchen.

21 August 2023: Joe Biden visits despite pleas from locals for tourists to stay away. Residents prevented from going to work. More than half the people in the official refuge camp dispersed. The Hawai‘ian people who were at ther Biden campaign event were hand selected by the teams of the president and the governor. Hawai‘ians lined up along the route that Biden took to the campaign event in order to protest against Biden.

29 August 2023: “Climate change is real. These is no question in my mind about it. The only question is how quickly it will progress.

Today, 18 jurists from the United Nations came to the conclusion that children can sue their countries over climate change under the “Convention on the Rights of the Child” treaty.” —[brian krassenstein](#)

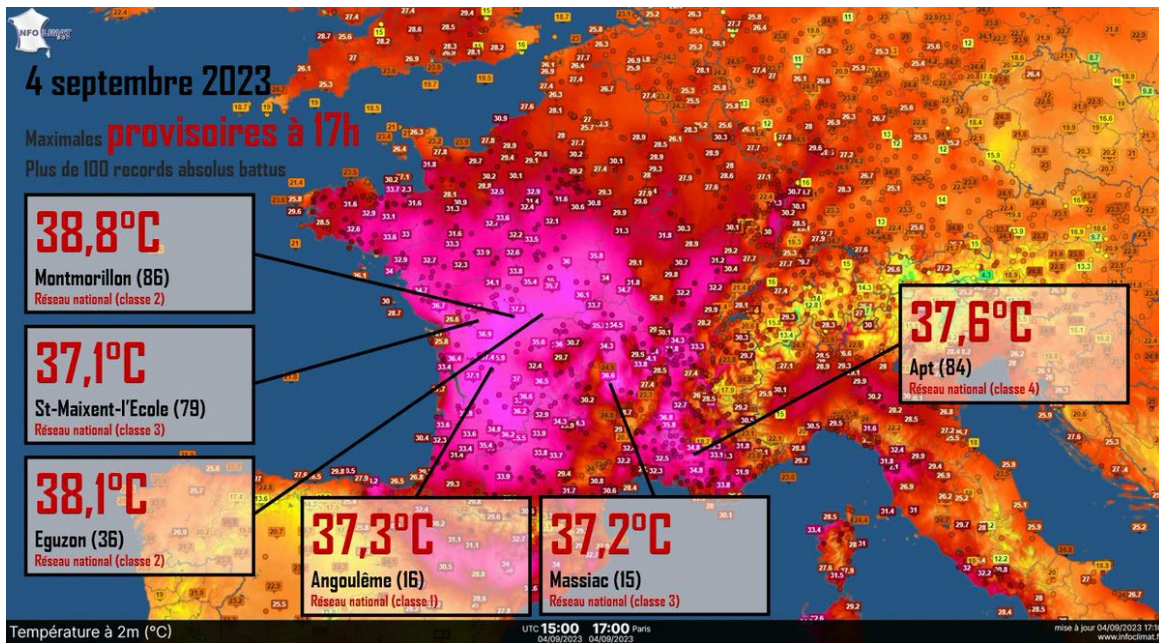
30 August 2023: “Joe Biden’s promise to effectively deal with climate disappeared when he approved more drilling than Trump, including the Willow Project and Mountain Valley Pipeline. The path to a livable planet lies with Cornel West and the Green Party.” —[Professor Anthony Zenkus](#)

4 September 2023: “Combien de preuves faut-il encore ?

Avec un indicateur thermique national de 24.95°C, la France vit sa journée la plus chaude de septembre depuis 1947 au moins. Des centaines de records mensuels, parfois explosés de plusieurs degrés... Franchement, ça devient dingue ! On bat les records avec une facilité déconcertante ! Le pire ? Ce devrait durer au moins une semaine !

[English translation] How much more evidence do you need?

With a national thermal indicator of 24.95°C, France is experiencing its hottest September day since at least 1947. Hundreds of monthly records, sometimes exploded by several degrees... Frankly, it's getting crazy! We break records with disconcerting ease! The worst? This should last at least a week!" —[Dr. Serge Zaka \(Dr. Zarge\)](#)



4 October 2023: “If someone told you HALF of our global economies would be destroyed due to climate change, would you believe them?

Well, the research doesn't lie. We're on a collision course, and this is a data-driven reality check.

New research from a group that's the antithesis of “alarmists”—The British Institute of Actuaries—just dropped a bombshell. They have zero motives to exaggerate.

Their take? We've SEVERELY underpriced climate risk.

Recall the 2008 financial crisis? Dubbed a ‘Minsky Moment’—a crash where asset values weren't what they seemed. Now, climate change is steering us toward a “Climate Minsky Moment”. Assets worldwide are OVERvalued because climate risks aren't properly accounted for.

Scenes we're witnessing—megafires, towns incinerated, Antarctica melting at alarming rates—are events theorized for 2050. Yet, here we are in 2023. Earth's warning sign: Our current models? Way off.

So our current crises were predicted for 2050. We're living the future.

The craziest part is, we're still relying on economic models see just 2% GDP drop for a 3°C rise.

Reality check: we're at around 1.5°C and the toll is massive. Our modeling needs a serious reboot.

In fact, many models assume GDP growth in a “Hothouse EarthÓ” scenario. Widespread crop failures, water scarcity, and town-leveling events somehow lead to growth? The Institute of Actuaries highlights the glaring flaws in such projections.

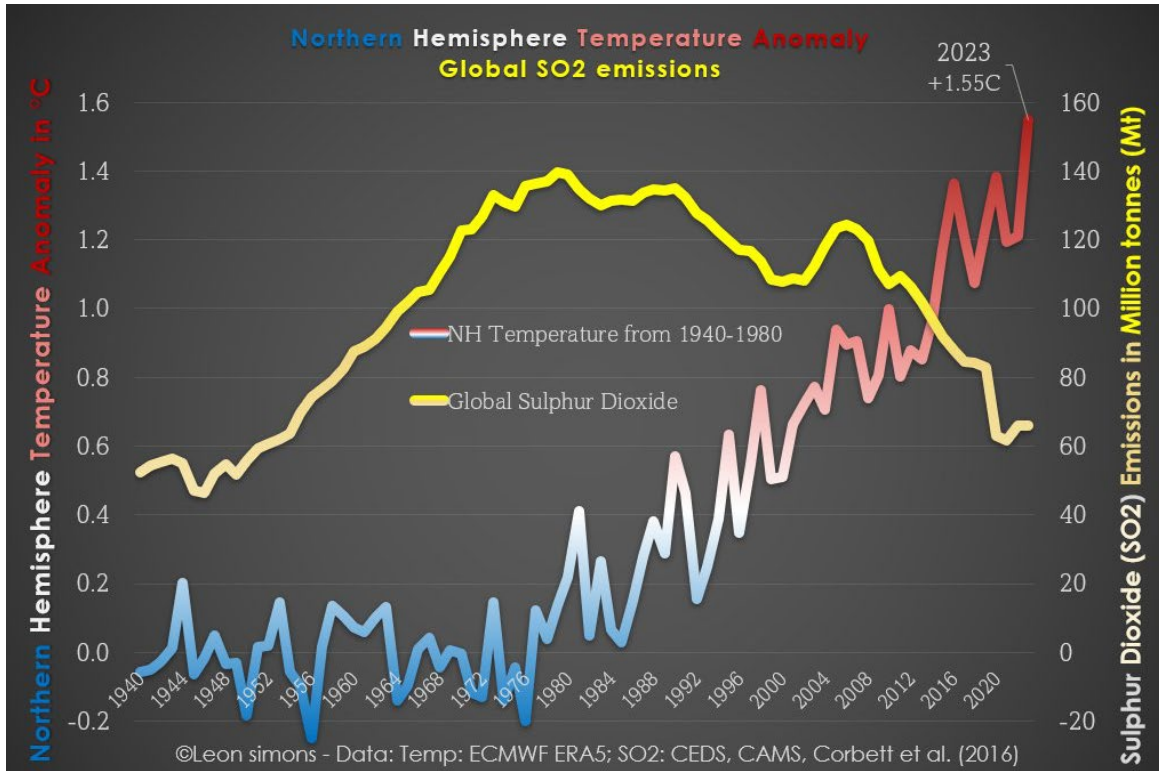
Historically, civilizations can't bear a 50% GDP loss. The stakes? Our very existence. This

isn't a drill—it's a clarion call for our age. The real threat of civilizational collapse is closer than we think. Act now, or our future might be history.” —[Umais](#)

8 January 2024: “Greenhouse gas warming of the Northern Hemisphere was masked by increasing sulphur air-polution for decades, until clean air regulations in the 80's.

With rapid reductions in air pollution, warming is now accelerating.

We need to prepare for rapid changes to our weather.” —[Leon Simons](#)



Hillary Clinton



clip gain automation

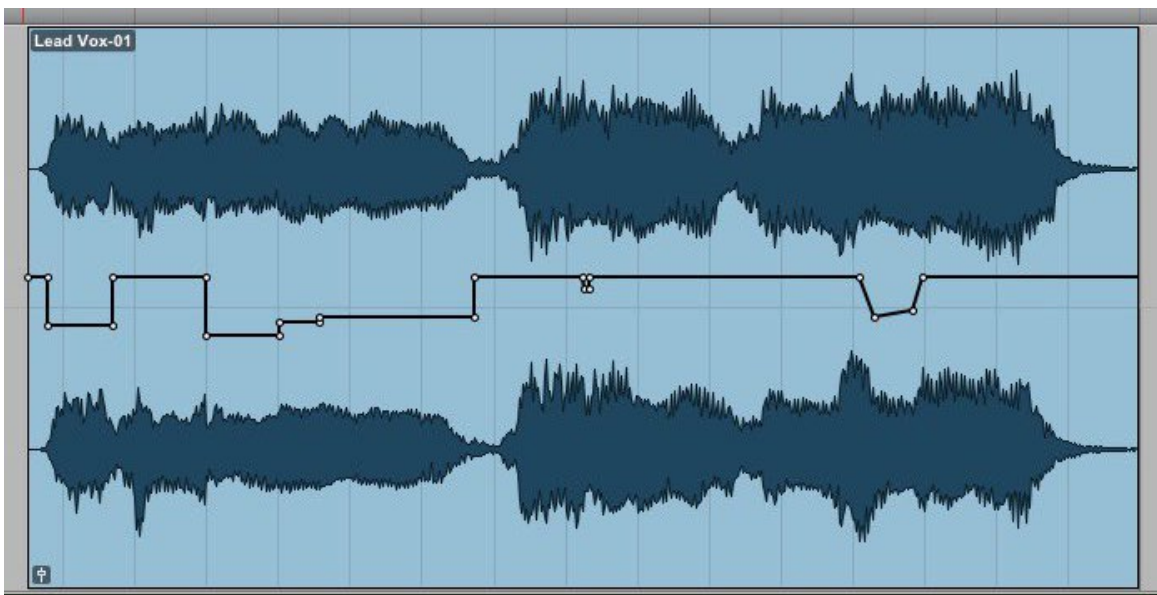
3 December 2023: “I’m impressed by the amount of people not knowing what is clip gain automation (while trying to argue about it)

It is literally the automation of your clip gain

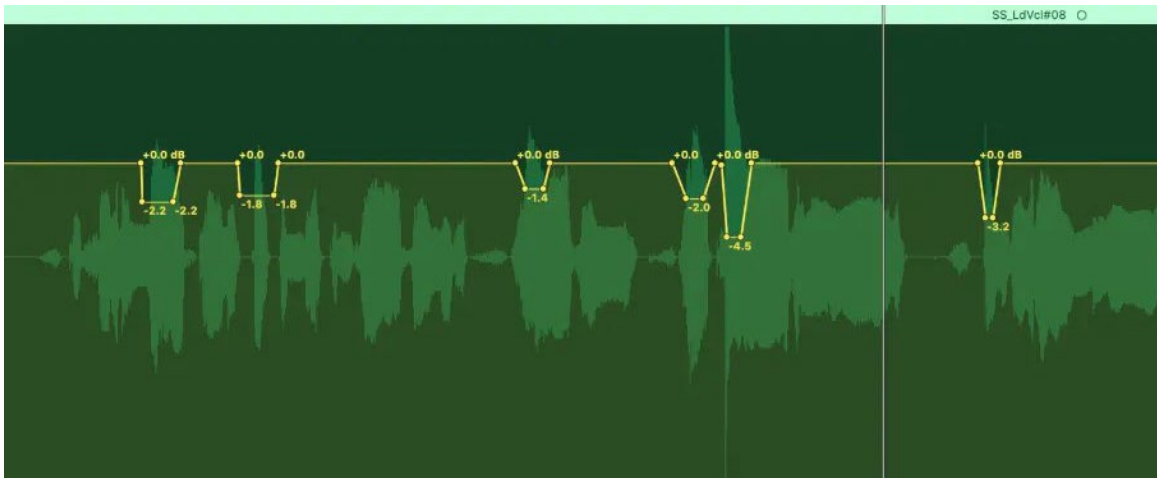
Automation is that line with dots and curves, drawn right on the clip

And when you change the automation curve, you see how you affect the waveform immediately. It literally changes its shape in real time as you edit the curve.

It is super useful, especially when you do very precise editing, including vocal editing of course” —[Nathaniel W.](#)



6 December 2023: “Why your vocals don’t sit in the beat?
Because you (probably) doing it wrong initially. You rely on your compressors.
But your vocals should already sit in the mix before compression
How? Clip gain automation.” — [Nathaniel W.](#)



6 December 2023: “Is the vocal rider plug-in better than no clip gain automation?” — [Khy](#)

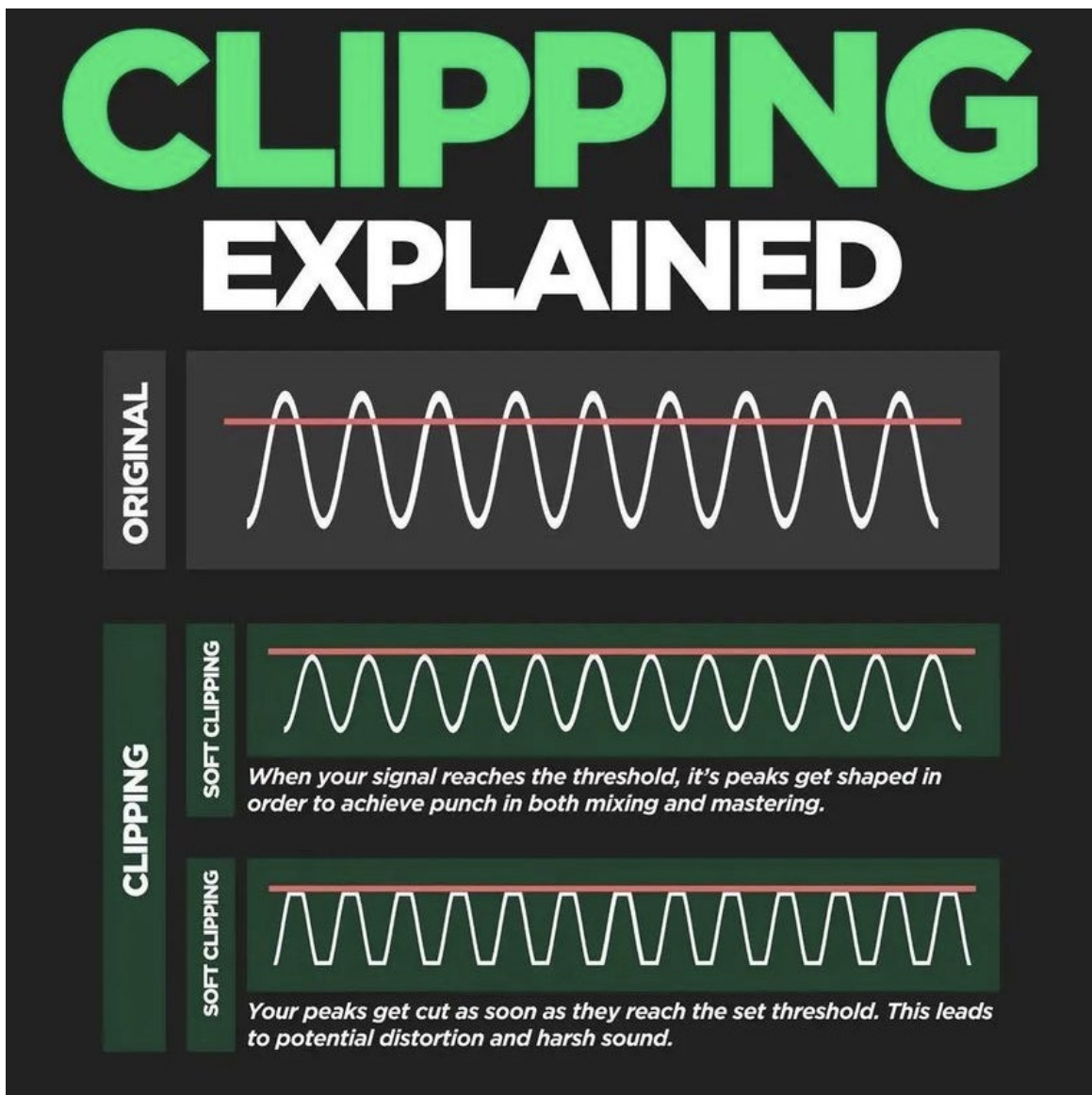
6 December 2023: “On some vocals may be. That are not too dynamic.

If you hear it working then it makes worse. If it works transparently and level is more balanced now then it became better.” — [Nathaniel W.](#)

clipping

21 December 2023: “clipping cheat sheet” — [Solar Heavy](#)

the graohic has an error in labeling: the bottom waveform is hard lcipping and the middle is soft clipping



clock-units

keyword: COBOL reserved word (z/OS)

clone

keyword: PHP reserved word

close

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows method

CLOSE

keyword: PL/I keyword

Statement

closed

keyword: JavaScript windows property

clue

The word “clue” comes from the Greek myth of Theseus and the Mintatour. The word “clew” in Greek mythology referred to a ball of yarn. Theseus was claimed to have escaped from the Mintatour’s labyrinth by unrolling the ball of yarn as he entered and following it back out after defeating the Mintatour. The word originally meant something that guides your path but eventually took on the modern meaning of any guidance that helps discover the truth.

cluster

keyword: SQL reserved word (Oracle)

cluster bombs

7 July 2023: US President Joe Biden announced that the US will include cluster bombs in the United States’ next \$800 million weapons package for Ukraine, as well as armored vehicles and air defense missiles.

7 July 2023: “It was a very difficult decision on my part. And by the way, I discussed this with our allies, I discussed this with our friends up on the Hill.” —President Joe Biden

7 July 2023: “We’re in a situation where Ukraine continues to be brutally attacked across the board by these cluster munitions with dud rates that are very high.” —President Joe Biden

7 July 2023: “We recognize that cluster munitions created risk of civilian harm from unexploded ordnance. This is why we deferred the decision for as long as we could, but there is also a massive risk of civilian harm if Russian troops and tanks roll over Ukrainian positions and take more Ukrainian territory and subjugate more Ukrainian civilians because Ukraine does not have enough artillery.” —US National Security Advisor Jake Sullivan

7 July 2023: “Russia started this unprovoked war against Ukraine. Russia could end it at any time by withdrawing its forces from Ukraine and stopping its brutal attacks against Ukraine’s cities and people. Until Russia does so, the United States and our allies and partners will stand united with Ukraine, for as long as it takes.” —US Secretary of State Anthony Blinken
[IMPORTANT NOTE: the US started the war in December 2013]

7 July 2023: “Let us be clear: Cluster bombs are crimes against humanity! They disproportionately kill children and innocent people far long after they’re dropped. Shame on President Biden for such revolting barbarity and shameless hypocrisy!
#ClusterBombsAreWarCrimes” —[Cornel West](#)

“The US dropped an estimated 260 million cluster munitions in Laos between 1964 and 1973. So far, fewer than 400,000 - or 0.47% - have been cleared and at least 11,000 civilians have been killed.” —Reuters

7 July 2023: “Joe Biden is sending internationally banned, highly toxic cluster bombs to Ukraine.

The same munitions that have wreaked havoc on Iraq, Yugoslavia, Afghanistan, Libya, Yemen, Gaza, and Lebanon.

Don’t expect the International Criminal Court to issue an arrest warrant though.” —[sarah](#)

7 July 2023: “Using inherently indiscriminate munitions in populated areas is illegal under international humanitarian law.

The use of cluster bombs is a war crime and a crime against humanity.

Cluster bombs are banned by a convention signed by more than 120 countries.” —[sarah](#)

7 July 2023 “In less than 24 hours after Ukraine & Russia enter serious peace talks, Biden’s admin. sends cluster bombs to Ukraine. A weapons system that they themselves condemned, claiming its use amounts to a war crime.” —[Joe Biden Hates Black People](#)

8 July 2023: “94% of cluster bomb victims are civilians (40% are children).

Allowing these cruel weapons to be transited through Shannon Airport must be resisted.

The US decision to send cluster bombs may not be something we can control, but we can

control whether or not we are complicit.” —[Peace and Neutrality Alliance \(Ireland\)](#)

8 July 2023: “In case you didn’t know by now, Joe “Cluster Bomb” Biden is not the lesser of two evils. And America is not the “good guys”.

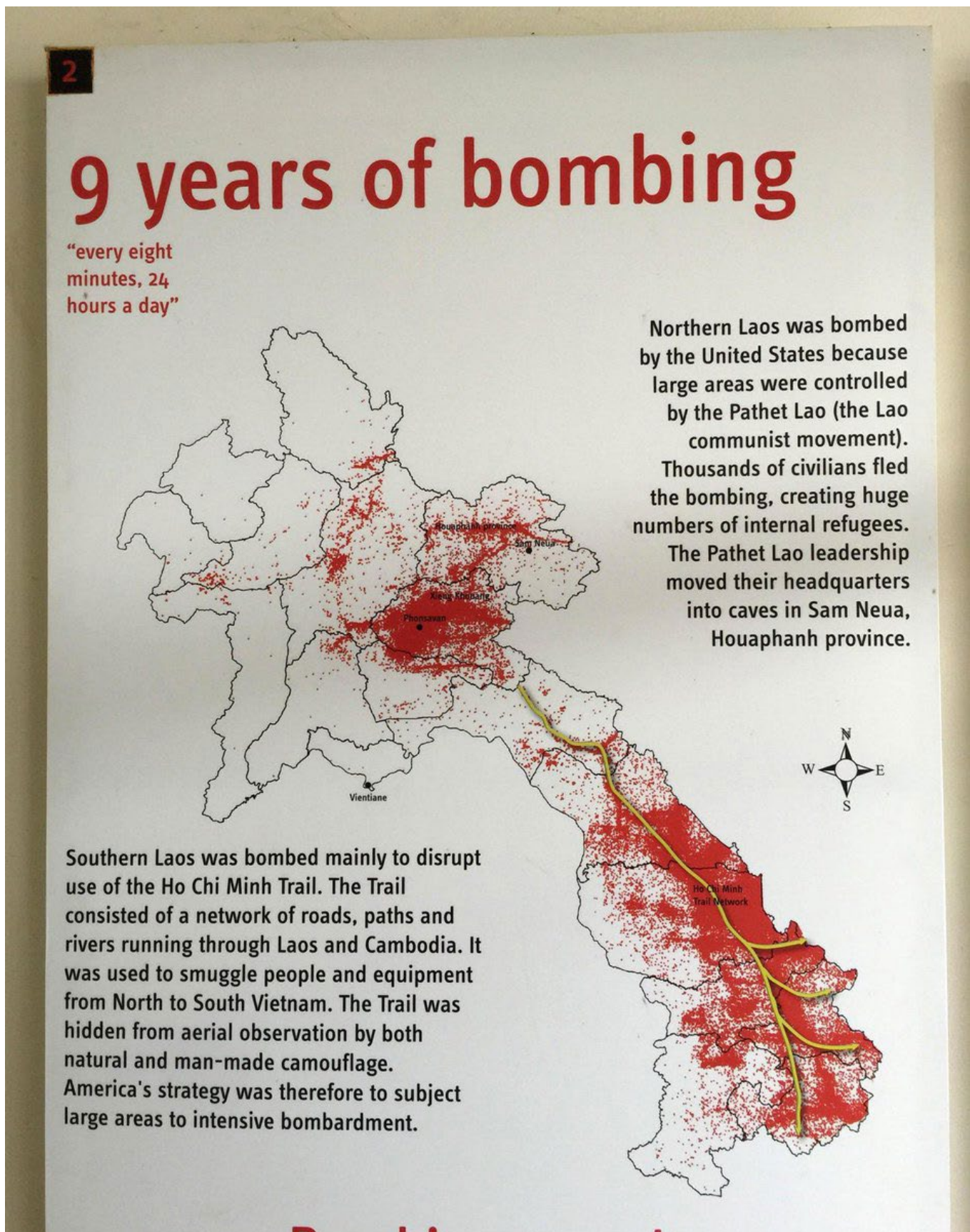
Cluster bombs are banned by over 100 nations as they kill or blow the limbs off civilians, especially children, for years after wars.” —[Polly Tickal](#)

8 July 2023: “The company making the #clusterbombs spent \$4.8 million on lobbying over the last 18 months and donated \$483,954 to both Republicans and Democrats last year. This is important context for such an unpopular decision.” —[Melanie D’Arrigo](#)

8 July 2023: “The US dropped 270 million cluster bombs on Laos.

“Every eight minutes, 24 hours a day, for nine years from 1964 until 1973, a planeload of cluster bombs was dropped on Laos by American B-52s.”

50 years later, civilians (and children) are still being blown up by the bombs.” —[sarah](#)



8 July 2023: "Nobody should be shocked that the US would give Ukraine cluster bombs. Did people forget what we did to Iraq, Libya, Syria and Afghanistan?" — [Black in the Empire](#)

"Yesterday the #US confirmed it would be dumping its stockpile of lethal Cluster Bombs, it

stopped using in 2016, into #Ukraine

Civilians are still dying in #Vietnam and #Cambodia due to their use there

18 months ago the #Whitehouse called cluster bomb use 'A war Crime' — [Chay Bowes](#)

"If that were true [alleged Russian use of cluster bombs], that would be a war crime." —Jen Psaki, 2022

8 July 2023: "Oh? The same cluster bombs the White House said in Feb '22 if Russia used them it would be a "war crime"

They are banned in 100 countries & the most recent data shows 97% of casualties from cluster bomb remnants were civilians. "It's okay when we do it!" — [Jason Bassler](#)

8 July 2023: "Ukraine used cluster bombs on multiple civilian areas in 2014-15. But sure, they aren't going to do that now because they assured they US they would be careful." — [Birriion](#)

8 July 2023: "The old, senile men will have us all killed! When will we be done with this shit? Homicidal maniacs. All of them." — [Antifa HR Director](#)

9 July 2023: "Until today, Lebanese civilians are still getting severely injured and killed by Israeli cluster bombs dropped in 2006. The hypocrite west doesn't care about human rights and UN laws when the killers are their allies.

IDF Commander: We fired more than a million cluster bombs in Lebanon.

Phosphorus and cluster bombs heavily used; unexploded munitions litter wide area of Lebanon." — [Hadi Nasrallah](#)

10 July 2023: "The US has announced it is complying with a Ukrainian request to supply it with controversial cluster munitions.

The move has been criticised by human rights groups as the weapon is banned by more than 100 countries.

Cluster munitions are a method of dispersing large numbers of tiny bomblets from a rocket, missile or artillery shell that scatters them in mid-flight over a wide area.

They are intended to explode on impact but a significant proportion are "duds", meaning they don't explode initially - this happens especially if they land on wet or soft ground.

They can then explode at a later date on being picked up or trodden on, killing or maiming the victim.

From a military perspective, they can be horribly effective when used against dug-in ground troops in trenches and fortified positions, rendering large areas too dangerous to move around in until carefully cleared.

More than 100 countries, including the UK, France, and Germany, have signed an international treaty - the Convention on Cluster Munitions - that outlaws the use or stockpiling of these weapons due to their indiscriminate effect on civilian populations.

Children are particularly prone to injury as the bomblets can resemble a small toy left in a residential or farmland area and are often picked up out of curiosity.

Human rights groups have described cluster munitions as "abhorrent" and even a war crime." — [BBC correspondent Frank Gardner](#)

11 July 2023: “Biden’s sending Ukraine ’cluster bombs”. Why would anyone believe that with his refusing diplomacy and continuing to escalate the war in Ukraine while US officials state that we’re “preparing for war with China” that we’ll even be alive to vote in the 2024 presidential election?” —[Jim Gala](#)

13 July 2023: “House Votes Down Amendment To Block Cluster Bomb Shipments To Ukraine
The amendment failed in a vote of 147-276.
Republican: 98 yea, 121 nay
Democrat: 49 yea, 155 nay” —[Antiwar.com](#)

CMDCHN

keyword: PL/I keyword

Option of ENVIRONMENT attribute

coal ash

“When coal is burned, a toxic waste known as coal ash is left behind. Filled with hazardous metals and toxic pollutants such as arsenic, lithium, and lead, coal ash is dangerous. @EPA recently made huge progress on coal ash. Now it’s time to finish the job.” —[Earthjustice](#)

cobol

abbreviation

keyword: COBOL reserved word (z/OS)

COBOL

keyword: PL/I keyword

Option of ENVIROMENT attribute

COBOL

keyword: PL/I keyword

Option of OPTIONS attribute

code

keyword: COBOL reserved word (z/OS)

code-set

keyword: COBOL reserved word (z/OS)

coffee

28 July 2023: “Uganda President Museveni to Putin:

“One facet of neo-colonialism and colonialism was Africa being confined to producing only raw materials, crops, like coffee, and minerals. I can give you an example: the global business for coffee is worth \$460 billion. That is the value of the coffee business in the world. But of those \$460 billion the coffee producing countries of the whole world share only \$25 billion and Africa shares only \$2.4 billion out of \$460 billion.

This issue is the biggest stunting factor why the African economies are stunted; they do not grow, because all the value is taken by other people. Germany earns more from coffee than the whole of Africa. Germany earns \$6.85 billion from coffee, while Africa earns only \$2.4 B 2.5 billion. This is the big scandal.

So, what I want to propose to Russia and China is to discourage as a policy the importing of raw materials from Africa, to instead work with the Africans to add value at source. This would within a very short time transform the economies of Africa from low- and mid-income to high- and middle-high income because we see from the example of Uganda that everything is depressed now; production is high but we are still producing raw materials.” ” —[COMBATE](#)

23 August 2023: “Starbucks could give every one of its 402,000 employees a \$4700 bonus check and still keep \$1,892,000,000 in net income this year. Instead they raised prices for no reason and are actively engaging in union busting. Get your coffee somewhere else.” —[Fuck](#)

[You I Quit](#)

See: coffee (nutritional information)

Coffee-mate

Coffee-mate is banned in Austria, Hungary, and Scandinavian nations because of the hydrogenated soybean and cottonseed oils, which raise bad cholesterol, lowers good cholesterol, and increases the risk of diabetes, heart disease, heart attack, and stroke.

COLBIN

keyword: PL/I keyword

Option of ENVIRONMENT attribute

collating

keyword: COBOL reserved word (z/OS)

color

Color exists only in the mind. In physical reality light has frequencies.

Columbia

19 October 2023: “BREAKING: President Gustavo Petro says that Colombia will open an embassy in Ramallah, Palestine, and send aid to Gaza’s borders to await the opening of a humanitarian corridor.” —[Pawel Wargan](#)

column

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

COLUMN (w)

keyword: PL/I keyword

Format item

column ties

Single- and Double-Column Ties: These are foundational ties that bind a limb (or multiple limbs) to an object or to another limb. They're called "column" ties because they wrap around cylindrical shapes, like wrists or ankles.

See also: shibari

See: .com — file extension

Comédie-française

4 January 2024: "The Comedie-Francaise or Theatre-Francais is one of the few state theaters in France. Founded in 1680, it is the oldest active theater company in the world. Established as a French state-controlled entity in 1995, it is the only state theater in France to have its own permanent troupe of actors. Shown is the entrance to the Salle Richelieu in Paris, the principal theater of Comedie-Francaise." —CIA World Factbook (material that expires after 30 days)



comment

keyword: SQL reserved word (Oracle, z/OS)

commit

keyword: SQL reserved word (z/OS)

Communism

17 August 2023: “flashback to the utter hysterical derangement of Cold War propaganda: communism is when you can't drink and drive and have to wear seatbelts in cars ” —[zei squirrel](#) [includes video]

Communist Party

NEGROES BEWARE DO NOT ATTEND COMMUNIST MEETINGS

Paid organizers for the communists are only trying to get negroes in trouble. Alabama is a good place for good negroes to live in, but it is a bad place for negroes who believe in SOCIAL EQUALITY.

The Ku Klux Klan Is Watching You. TAKE HEED

Tell the communist leaders to leave.
Report all communist meetings to the

Ku Klux Klan
Post Office Box 651, Birmingham, Alabama.

Compatitble Time-Sharing System (CTSS)

operating system

Proprietary OS by IBM

developed at MIT's Computation Center for use on a modified IBM 7094 — [Wikipedia: List of operating systems](#)

COMPILETIME

keyword: PL/I keyword

Built-in function

completion

16 July 2023: “Pro tip: Don’t let your demand for perfection lead you down a path of procrastination; my all-time favorite songs are rarely what I would consider “perfected”, but they are still my favorites. Pursue completion.” — [Ed the Soundman](#)

COMPLETION(event)

keyword: PL/I keyword

Abbreviated: CPLN

Built-in function, pseudo-variable

COMPLEX

keyword: PL/I keyword

Abbreviated: CPLX

Attribute

COMPLEX(a, b)

keyword: PL/I keyword

Built-in function, pseudovisible

component

keyword: VHDL reserved key word

composite knuckles

noun “Any device or instrument made wholly or partially of composite materials other than a medically prescribed prosthetic that is worn for purposes of offense or defense in or on the hand (Penal Code Section 16405)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

compress

keyword: SQL reserved word (Oracle)

compressors

11 December 2023: “Tube vs Optical compressors

Tube compressors and optical compressors have unique sonic characteristics and vary in applications.

Tube Compressors:

- Sound Character: Tube compressors, using vacuum tubes in their circuitry, often provide a warm, harmonically rich sound. They can add coloration to the signal.
- Attack and Release: Generally, tube compressors offer a wide range of attack and release times, allowing for versatile dynamics control.
- Applications: Commonly used for adding warmth and character to vocals, instruments, and overall mix bus. They are suitable for a variety of genres, especially where a vintage, analog warmth is desired.

(Fairchild 670)

Optical Compressors:

- Sound Character: Optical compressors use a light-dependent resistor (LDR) for compression. They are known for a smooth and transparent sound without much coloration.
- Attack and Release: Optical compressors often have a slower response, providing a gentle compression suitable for smoothing out dynamics.
- Applications: Ideal for scenarios where transparent compression is needed, such as leveling vocals, acoustic instruments, and scenarios where the goal is subtlety rather than a pronounced coloration.

(ACME Audio XLA-3)

ÑÑÑÑÑÑÑÑÑÑ-

There are also tube optical compressors that combine the warmth of vacuum tubes with the smooth compression characteristics of optical components.

They use a tube for gain control and an optical circuit for compression, resulting in a unique and pleasant sonic character.

(CL 1B or LA-2A)” —[Nathaniel W.](#)

22 December 2023: “How does a compressor work?

For beginners.

I already made that post but people still ask about it. Let’s go then.

Imagine the situation where you have a vocalist that sometimes shouts loud and sometimes he is whispering.

You won't ever be able to set the level for this track, because loudness changes all the time too drastically. Your vocals will be either too loud sometimes or too quiet.

· What’s the solution?

The solution is to compress the sound.

· What does that mean?

It means that everytime your vocalist starts to shout, compressor will automatically reduce the level.

Like a person that sits behind the mixer and turns the volume knob down when the artist sings too loud.

· What you will get?

You will get a vocal track with more even sound. Quiet parts will stay untouched yet louder parts will be tamed. As a result, all the vocals are perfectly audible and nothing is too loud.

· How you achieve that?

You achieve that by setting up a few controls.

- Threshold: you should tell the compressor what is “too loud”. At this level compressor begins to work and starts to turn down the volume.

- Ratio: you should tell the compressor by how much level should be reduced.

2:1 means that everything that is considered “too loud”, according to threshold, should be reduced 2x in level.

4:1 is 4x reduced in level, etc.

∞:1 means that signal will be infinitely reduced in level after the threshold, hence nothing will surpass the threshold you will set. This is how limiters work. They limit the signal by your

threshold.

This is already enough to understand how compressor works.

But we will look at more basic controls.

- Attack: you should tell the compressor how quickly it should reduce the level since it became “too loud”.

20 ms attack means that compressor will reach target amount of compression in 20 ms since the audio became “too loud”.

1 ms attack means that compressor will tame the signal almost immediately after it exceeded the threshold.

- Release: you should tell the compressor how quickly it should restore the original level since the audio is not exceeding the threshold anymore.

100 ms release means that compressor will restore the original level in 100 ms after audio is not “too loud” anymore.

· Why do you need to set attack and release?

For example, some audio has very short peaks, which you might want to keep. It can be transients from your instrument, like pulling a guitar string or pressing a piano note. This moment is louder and it's a common practice to not compress it.

If compressor worked immediately it would destroy your transients, hence your sound.

And the opposite situation, you want to tame some nasty peaks, which happen very quick, and you need the fastest settings for it.

· However, even at slow settings, compressor's job still happens very quickly, it would be impossible for a human to turn the volume up and down that fast.

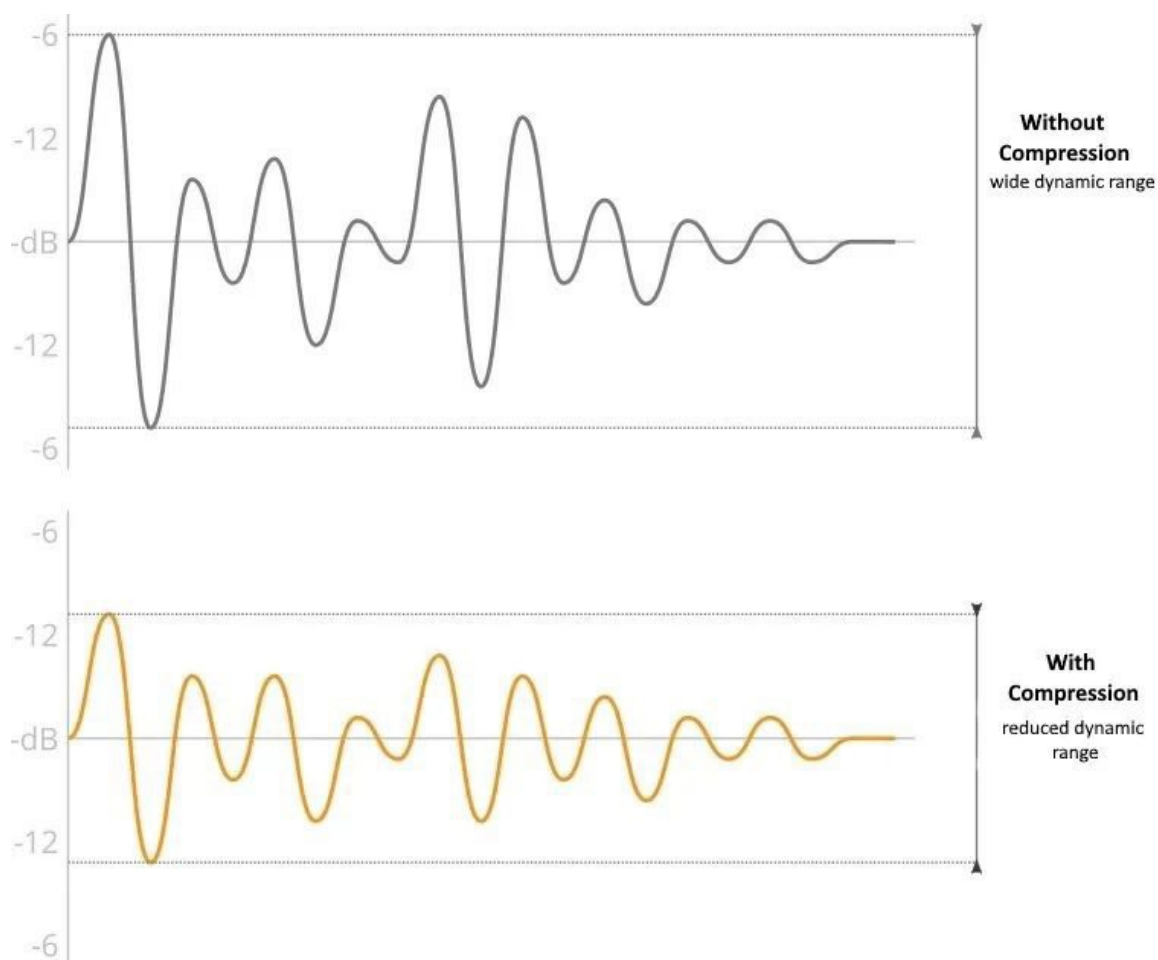
My recommendation for beginners is to use compressors with good visual feedback (like Fabfilter Pro C2), you will understand what's happening much faster and see how you affect the sound and compressor's work by turning different knobs.

Analog modeled compressors can have fixed parameters and behavior, which makes them unique and applicable for certain applications, not for everything. But they can be easier to set up.

Some compressors, even though their parameters are not fixed, they can't work slowly, or quickly, which again, makes them applicable only for certain purposes.

· Dynamic range - difference between the loudest and most quiet part of the signal.

· Compressor - a device, designed to reduce dynamic range.” —[Nathaniel W.](#)



com-reg

keyword: COBOL reserved word (z/OS)

comma

keyword: COBOL reserved word (z/OS)

common

keyword: COBOL reserved word (z/OS)

communication

keyword: COBOL reserved word (z/OS)

comp

keyword: COBOL reserved word (z/OS)

comp-1

keyword: COBOL reserved word (z/OS)

comp-2

keyword: COBOL reserved word (z/OS)

comp-3

keyword: COBOL reserved word (z/OS)

comp-4

keyword: COBOL reserved word (z/OS)

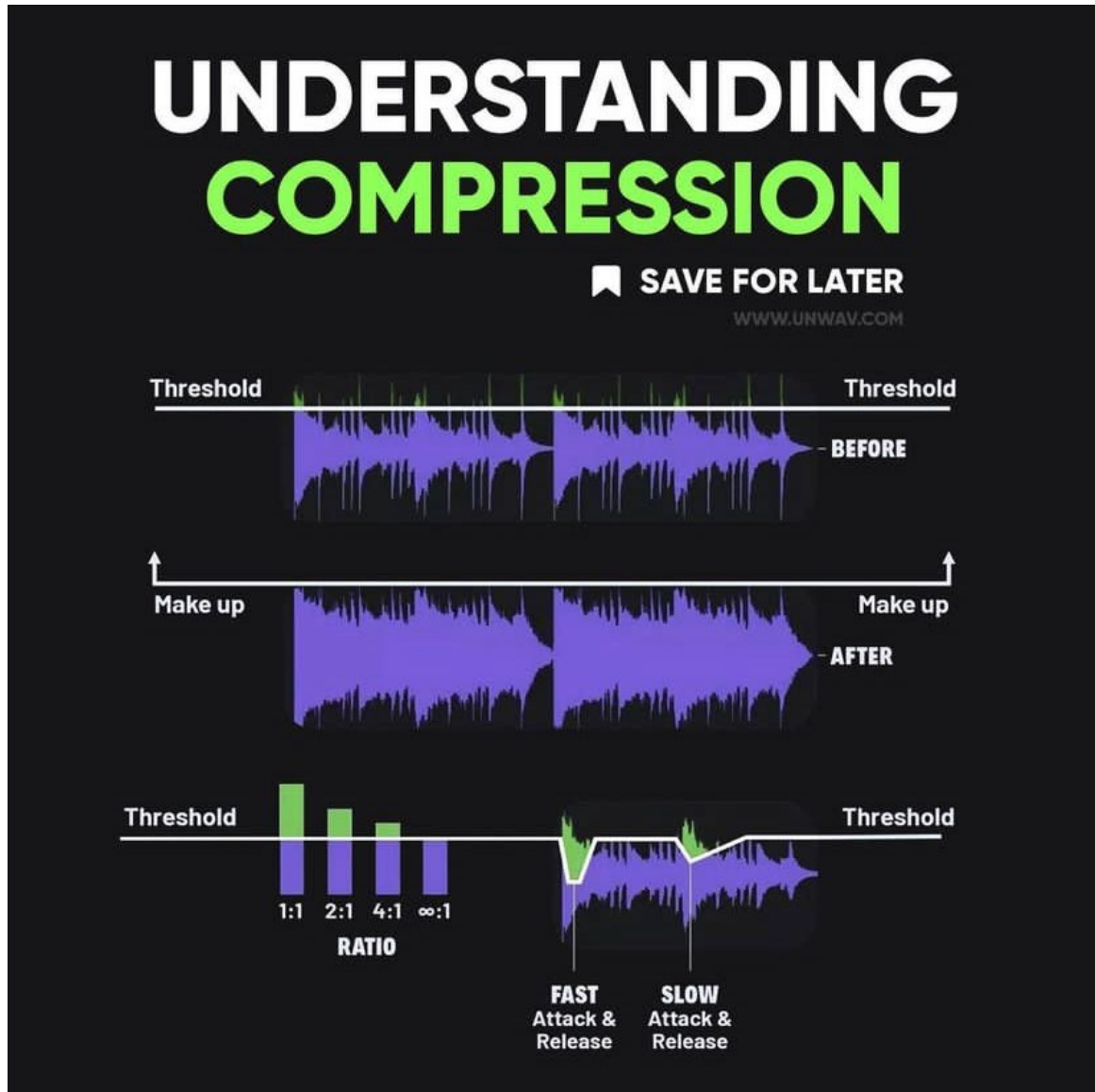
comp-5

keyword: COBOL reserved word (z/OS)

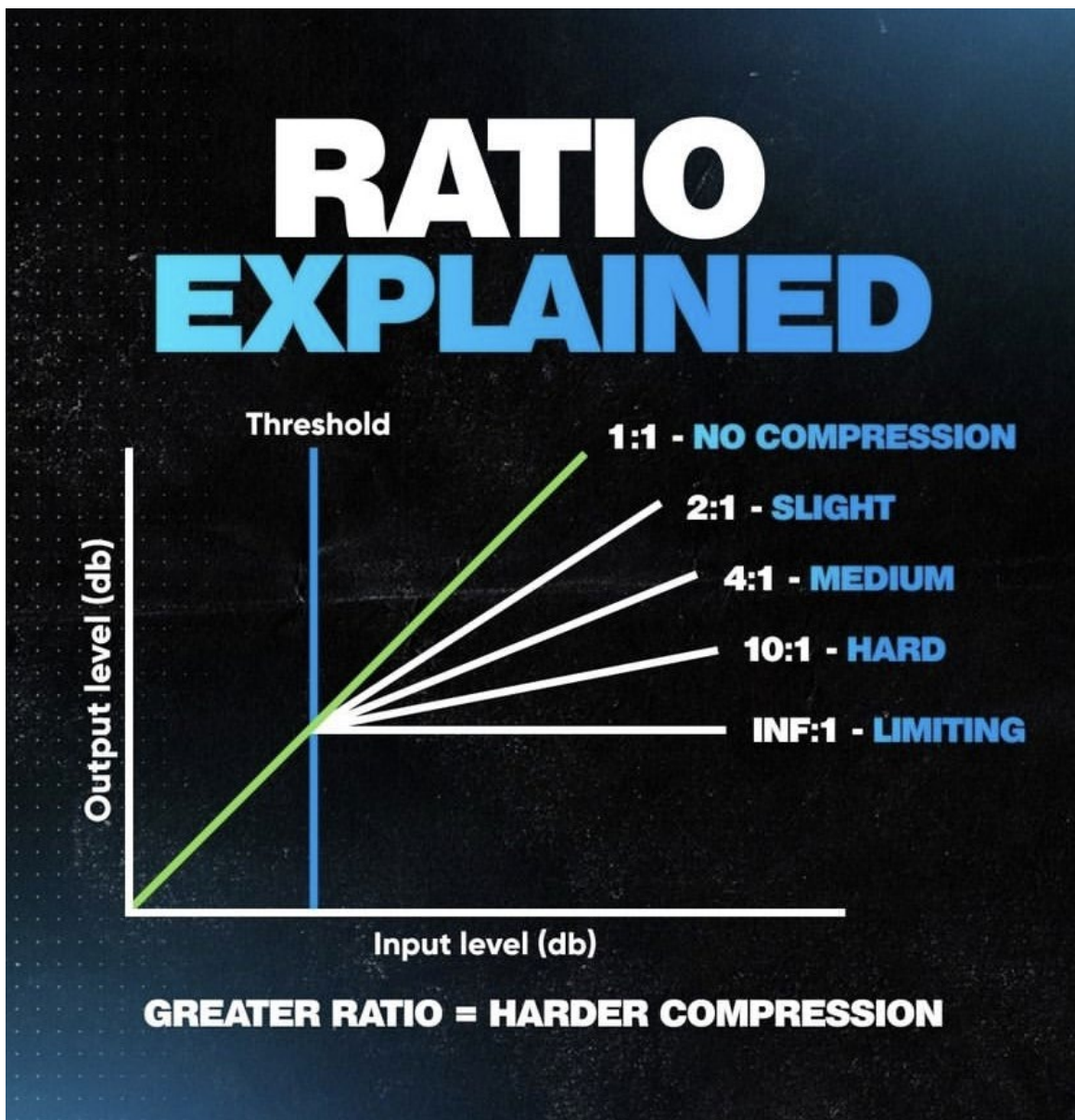
See: [_Complex](#) — Objective C

compression

3 October 2023: “compression cheat sheet” — [Solar Heavy](#)



13 November 2023: “compression cheat sheet” — [Solar Heavy](#)



22 November 2023: “compression cheat sheet” — [Solar Heavy](#)



13 December 2023: “Pro compression tip

Use parallel compression on vocals if you want to add articulation and bring out more details
It also helps the vocals to sit in the beat better

1176 works great. Distressor too.

Very fast, smashing and coloring compressors work really well for this purpose.” —[nathaniel](#)

[W.](#)

24 December 2023: “Fabfilter Pro-MB

I find it the most powerful and versatile multiband compressor.

Covers 100% of my needs from tool like this.” —[Nathaniel W.](#)

fabFilter Pro-MB

Pro multi-band compressor & expander



10101
01110
11001
fabfilter
software instruments

24 December 2023: “I personally use the c6 by waves” — [Parikshit](#)

26 December 2023: “Pro compression tip

The effect of compressor should perceive as better dynamics and possibly more interesting color, if your compressor colors the sound

It should sound like the audio was just recorded better.

You shouldn't hear “the effect” of compressor

If it doesn't sound natural, if it sounds with “effect”, you overcompressed the audio.

And if it wasn't the goal, fix it.” — [Nathaniel W.](#)

28 December 2023: “Pro compression tip

Lookahead is a great feature in compressors. It allows to analyze the incoming signal before it hits the compressor.

Very useful when you want to compress some very fast sounds, like hats for example.

Or, when you sidechain from a very fast sound, like kick for example, and you want the compressor to react appropriately.

You using fast settings, but since nothing can happen immediately, analyzing sound in real-

time may not allow the compressor to work as fast as you can.

And without the lookahead you may get some ugly clicks.

One of the most popular compressors with Lookahead feature is Fabfilter Pro-C 2.”

—[Nathaniel W.](#)



29 December 2023: “How to compress:

1. Perfect your mix levels.
2. Pick a track to compress.
3. Compress by ear and in-context with the mix, adjusting the makeup-gain as needed.
4. Push the makeup-gain of the compressor too high.
5. Lower the makeup-gain until it sounds exactly right.
6. A/B.” —[Eduard](#)



6 January 2024: “How to compress vocals?”

Basic vocal compression setup is next:

- First compressor reacting to peaks only, fastest attack, very fast release, 2-5 db of compressing peaks, around 8:1 ratio
- Next compressor works more smoothly, with fast attack again but much slower release this time, 2:1 or 4:1 ratio, 1-2 db of gain reduction” —[Nathaniel W.](#)

13 January 2024: “Retro Instruments STA-Level

One of the amazing compressors that is underrated for some reason

- It sounds great.
- I see it on big studios every time.

In digital domain, I use Acustica Audio Smoke, but there is also a version from Arturia.”

—[Nathaniel W.](#)



computational

keyword: COBOL reserved word (z/OS)

computational-1

keyword: COBOL reserved word (z/OS)

computational-2

keyword: COBOL reserved word (z/OS)

computational-3

keyword: COBOL reserved word (z/OS)

computational-4

keyword: COBOL reserved word (z/OS)

computational-5

keyword: COBOL reserved word (z/OS)

compute

keyword: COBOL reserved word (z/OS)

computer

kəm'pju:-tə (Received Pronunciation), **kəm'pju:-tə** (General American)

noun

1. (now *rare*, chiefly *historical*) a person employed to perform computations.

Historically, a male is called a **computer** or **computist** and a female is called a **comptress**.

2. A programmable device that accepts data from input and/or memory, performs prescribed mathematical calculations and logical operations, and outputs, displays, or stores the results of these computations. Most commonly an electronic digital computer.

Some examples include super computers, mainframes, minicomputers, microcomputers, desktop computers, laptop computers, tablets, smartphones, and embedded systems.

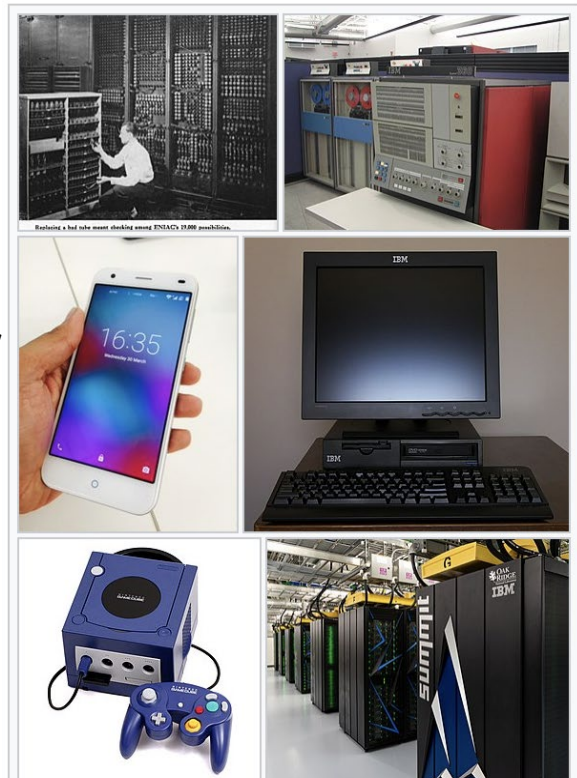
etymology: 1600-50 CE Modern English *compute* + *-er*, related to Middle French *computeur*; first known use (for an occupation) in the 1613 book *The Yong Mans Gleanings* by Richard Brathwait: “I haue [sic] read the truest computer of Times, and the best Arithmetician that euer [sic] breathed, and he reduceth thy dayes into a short number.”; first use referencing a calculating machine in 1897

From the Wikipedia page on [Computer](#)

A **computer** is a digital electronic machine that can be programmed to carry out sequences of arithmetic or logical operations (computation) automatically. Modern computers can perform generic sets of operations known as programs. These programs enable computers to perform a wide range of tasks. A **computer system** is a “complete” computer that includes the hardware, operating system (main software), and peripheral equipment needed and used for “full” operation. This term may also refer to a group of computers that are linked and function together, such as a computer network or computer cluster.

A broad range of industrial and consumer products use computers as control systems. Simple special-purpose devices like microwave ovens and remote controls are included, as are factory devices like industrial robots and computer-aided design, as well as general-purpose devices like personal computers and mobile devices like smartphones. Computers power the Internet, which links billions of other computers and users.

Early computers were meant to be used only for calculations. Simple manual instruments like the abacus have aided people in doing calculations since ancient times. Early in the Industrial Revolution, some mechanical devices



Computers and computing devices from different eras – clockwise from top left:

Early vacuum tube computer ([ENIAC](#))
 Mainframe computer ([IBM System 360](#))
 Desktop computer ([IBM ThinkCentre S50](#) with monitor)
 Supercomputer ([IBM Summit](#))
 Video game console ([Nintendo GameCube](#))
 Smartphone ([LYF Water 2](#))

were built to automate long tedious tasks, such as guiding patterns for looms. More sophisticated electrical machines did specialized analog calculations in the early 20th century. The first digital electronic calculating machines were developed during World War II. The first semiconductor transistors in the late 1940s were followed by the silicon-based MOSFET (MOS transistor) and monolithic integrated circuit (IC) chip technologies in the late 1950s, leading to the microprocessor and the microcomputer revolution in the 1970s. The speed, power and versatility of computers have been increasing dramatically ever since then, with transistor counts increasing at a rapid pace (as predicted by Moore's law), leading to the Digital Revolution during the late 20th to early 21st centuries.

Conventionally, a modern computer consists of at least one processing element, typically a central processing unit (CPU) in the form of a microprocessor, along with some type of computer memory, typically semiconductor memory chips. The processing element carries out arithmetic and logical operations, and a sequencing and control unit can change the order of operations in response to stored information. Peripheral devices include input devices (keyboards, mice, joystick, etc.), output devices (monitor screens, printers, etc.), and input/output devices that perform both functions (e.g., the 2000s-era touchscreen). Peripheral devices allow information to be retrieved from an external source and they enable the result of operations to be saved and retrieved.

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concatenate

keyword: SQL reserved word (z/OS)

Concurrent CP/M

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

the successor of CP/M-80 and MP/M-80 — [Wikipedia: List of operating systems](#)

CP/M

Concurrent CP/M 8-16

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a dual-processor variant of Concurrent CP/M for 8086 and 8080 CPUs. — [Wikipedia: List of operating systems](#)

CP/M

Concurrent CP/M-68K

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a variant for the 68000 — [Wikipedia: List of operating systems](#)

CP/M

Concurrent CP/M-86

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

the successor of CP/M-86 and MP/M-86 — [Wikipedia: List of operating systems](#)

CP/M

Concurrent DOS

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

the successor of Concurrent CP/M-86 with PC-MODE — [Wikipedia: List of operating systems](#)

DOS

Concurrent DOS 8-16

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a dual-processor variant of Concurrent DOS for 8086 and 8080 CPUs — [Wikipedia: List of operating systems](#)

DOS

Concurrent DOS 286

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

Concurrent DOS for the Intel 80286 — [Wikipedia: List of operating systems](#)

DOS

Concurrent DOS 386

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

Concurrent DOS for the Intel 80386 — [Wikipedia: List of operating systems](#)

DOS

Concurrent DOS 386/MGE

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a Concurrent DOS 386 variant with advanced graphics terminal capabilities — [Wikipedia: List of operating systems](#)

DOS

Concurrent DOS 68K

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a port of Concurrent DOS to Motorola 68000 CPUs with DOS source code portability capabilities — [Wikipedia: List of operating systems](#)

DOS

Concurrent PC-DOS

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a Concurrent DOS variant for IBM compatible PCs — [Wikipedia: List of operating systems](#)

DOS

Concurrent DOS XM

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a real-mode variant of Concurrent DOS with EEMS support — [Wikipedia: List of operating systems](#)

DOS

cond

keyword: SQL reserved word (z/OS)

See: COND — PL/I condition

See: COND — PL/I attribute

CONDITION (name)

keyword: PL/I keyword

Abbreviated: COND

Condition

CONDITION

keyword: PL/I keyword

Abbreviated: COND

Attribute

conductor

Q: How many conductors does it take to screw in a light bulb?

A: No one knows, no one ever looks at him.

confederacy

“CONFEDERACY — Government by a league of (possibly diverse) social entities so designed as to promote the comon good of each.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

configuration

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

confirm

keyword: JavaScript windows method

Congo

“King Leopold used to chop off the hands of Congolese people when they don’t meet up to the daily quota of rubber during the colonial period. Today, there are hand-chocolate candies in Belgium celebrating Leopold.” —[Adémólá](#)

18 September 2023: “Despite the fact that Congo is the richest country in the world base on its Natural Resources, Congolese women and children migrate or flee violence to other countries in Africa, the Middle East, and Europe, where traffickers exploit them in sex trafficking or forced labor in agriculture, diamond mines, or domestic service.

Most of this forced labor and exploitation are backed by several European companies and countries so they can have access to Congo abundant Natural Resources.” —[Typical African](#)

CONJG(x)

keyword: PL/I keyword

Built-in function

See: CONN — PL/I

connect

keyword: SQL reserved word (ANSI, Oracle)

CONNECTED

keyword: PL/I keyword

Abbreviated: CONN

Attribute

CONSECUTIVE

keyword: PL/I keyword

Option of ENVIRONMENT attribute

consciousness

12 July 2023: “I often wonder where consciousness starts, as we progress from one cell to ~35 trillion cells.

If the Standard Model is correct, then quarks & leptons become “conscious” no later than ~13.8B years from start, assuming there are no sentient aliens.

Btw, where are the aliens!?” —[Elon Musk](#)

14 July 2023: “Particle physicist here to remind everyone that quarks and leptons are not and have never been conscious.

Humans are made of quarks and leptons and are conscious. That does not mean the particles themselves are conscious.

Hope we can all be clear on that.” —[Chanda Prescod](#)

const

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

constant

keyword: Ada reserved key word

keyword: VHDL reserved key word

CONTROLLED

keyword: PL/I keyword

Abbreviated: CTL

Attribute

constructor

keyword: JavaScript windows object

contains

keyword: COBOL reserved word (z/OS)

content

keyword: COBOL reserved word (z/OS)

Contiki

operating system

Proprietary OS used by Amstrad.

Proprietary OS used by Atair for 8-bit, Portfolio.

Proprietary OS used by Apple for the Apple II family.

continue

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

continuous controller

keyword: MIDI comamnd

B0 hex (where n is the channel number)

2 paraaemters

paramater 1: controller #

paramater 2: controller value

control

keyword: COBOL reserved word (z/OS)

controls

keyword: COBOL reserved word (z/OS)

See: CONV — PL/I

Convergent technologies Operating System

operating system

Proprietary OS by Convergent Technologies.

converting

keyword: COBOL reserved word (z/OS)

CONVERSION

keyword: PL/I keyword

Abbreviated: CONV

Condition

Copland

operating system

Proprietary OS by Apple for the Apple Macintosh.

Apple Macintosh

Cop City

6 June 2023 at 7:24 am: “BREAKING: In the dead of night, Atlanta's City Council voted 11-4 to approve \$67 million for a police training center that will be an incubator for the criminalization of protest and attacks on low-income communities. ” —[Steve Donziger](#)

3 June 2023: “BREAKING: Military-style police in Atlanta invade a house to lock up 3 people in charge of a legal fund that helps “Cop City” protesters get bailed out of jail. This is a brazen assault on the US Constitution.” —[Steven Donziger](#) [the link includes video]

“A bone-chilling development in Atlanta just now: heavily militarized police just arrested bail support and legal defense workers who are providing charitable support to protestors arrested for opposing CopCity in Atlanta. Police are calling ‘financial crimes.’ ;” —[Alec Karakatsanis](#)

6 June 2023 at 2:57 am: “Well, the Atlanta City Council passed \$67 million in funding for Cop City, by an 11-4 margin, after over 15 hours of essentially unanimous public comment against it. This was a historic 24 hours. Absolutely shattered every record of public turnout. Made clear, unequivocally, that Atlanta residents are against Cop City. Over a thousand people turned out, repping many more. Incredibly diverse crew. Everyday Atlantans. Firmly against Cop City. This vote drives home: there is no democracy in Atlanta. This project most directly impacts those who have no representation on council, and the hundreds/thousands who do have Council representatives were all ignored today. Every Councilmember who voted in favor of Cop City did so knowing that they were siding with powerful corporations and the police foundation, not the people of Atlanta. There should be no confusion that 11 councilmembers directly, knowingly sold out their constituents. And while there’s no democracy in Atlanta, there is a MOVEMENT in Atlanta. One that has never been dependent on council for its legitimacy or action. One that will keep fighting just as it has for years. One important point: this was us using the “right” channels that the powerful always tell us to use. And doing so in a historic way. And still being ignored. So Council only has itself to blame when people decide to use channels that are not condoned by the powerful. Thank you to the councilmembers who voted no: @LilianaforATL (who did a lot of work behind the scenes to try to stop this), @jasonsdozier, Keisha Waites, and @antoniolewisatl.” —[StopCopCity](#)

copper

scientific information:

Copper is a ductile metal with excellent electrical conductivity.

Name: copper

Symbol: Cu

Atomic Number: 29

Periodic Table: Group (or family) 11 (old European IUPAC system group IB; old American CAS system group IB), coinage metals; Period 4; d-block

Atomic mass: 63.546(3) g/mol

See: [copper \(nutritional information\)](#)

COPS Hiring Program

On 25 July 2022, Biden bragged he was “pro-cop”

On 9 March 2023, the Joe Biden White House bragged “The Budget provides DOJ \$4.9 billion in discretionary resources for State and local grants to enhance public safety, including \$537 million for the COPS Hiring Program,< and \$30 billion in mandatory resources to fully fund President Biden’s Safer America Plan, a comprehensive blueprint to protect the safety of our communities.”

From [FACT SHEET: President Biden’s Safer America Plan](#) (items in bold are in bold in the original document):

“1. Funds the police and promotes effective prosecution of crimes affecting families today, including by funding 100,000 additional police officers who will be recruited, trained, hired, and supervised consistent with the standards in the President’s Executive Order to advance effective, accountable community policing in order to enhance trust and public safety;”

“As President Biden said during his State of the Union Address, “We should all agree the answer is not to defund the police. It’s to fund the police. Fund them with the resources and training they need to protect our communities.” We cannot abandon our streets, and we should not have to choose between safety, public trust, and equal justice.”

“Put 100,000 additional officers for effective accountable, community policing on our streets. The Safer America Plan will provide the investment necessary to recruit, train, support, and manage 100,000 additional police officers for effective, accountable community policing over the next five years. Specifically, the Plan calls on Congress to appropriate \$10.877 billion in mandatory funding over five years for the COPS Hiring Program, which, combined with the President’s discretionary funding proposal for this program, will fully fund this goal with \$12.817 billion in total. These funds will be used to get officers out of their stations and squad cars and into the community, walking the beat on foot patrols that have been shown to enhance officer morale, improve community relations, and have a deterrent effect on crime.”

copy

keyword: COBOL reserved word (z/OS)

COPY

keyword: PL/I keyword

Option of GET statement

Coral

keyword: HTML color name



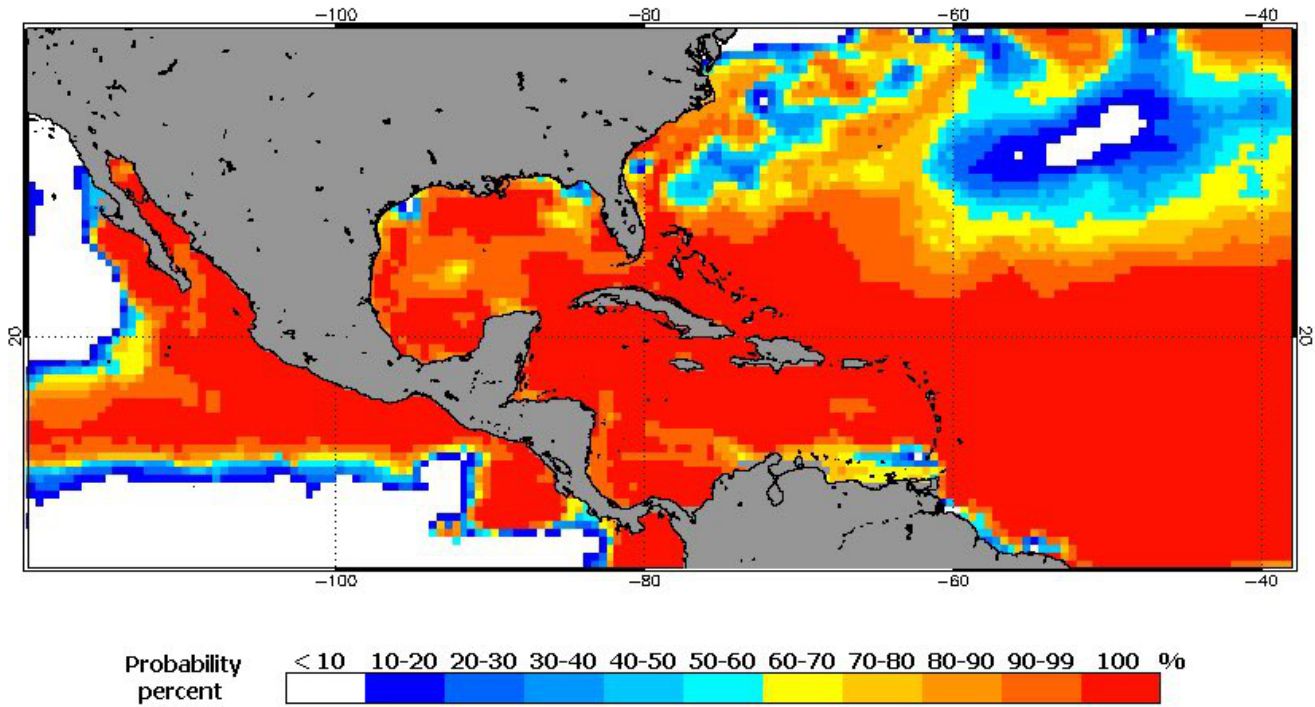
coral

1 August 2023: “We’re already losing our coral and we’re about to begin deep sea mining endorsed by James Cameron. It’s like humanity is an alcoholic drinking itself to death.” —[Geoff McFarlan](#)

coral bleaching

5 August 2023: “NOAA’s coral bleaching forecast for the next 4 months is shocking. Virtually all North American coral reefs could face bleaching in the next 4 months.” —[Colin McCarthy](#)

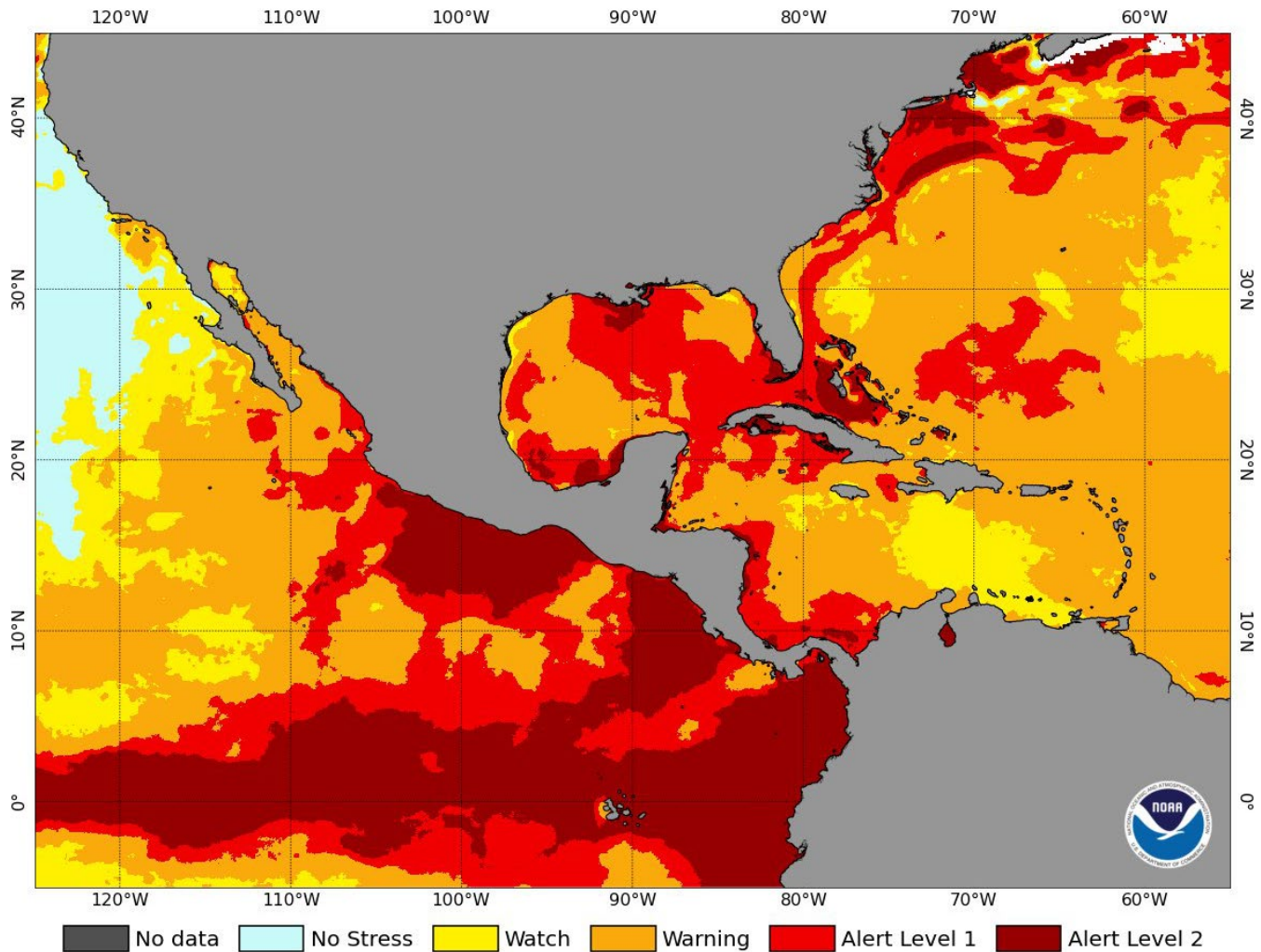
2023 Aug 1 NOAA Coral Bleaching Heat Stress Probabilities (Alert 1 & 2) for Aug–Nov
Experimental, v5.0, CFSv2–based, 28 to 112 Ensemble Members



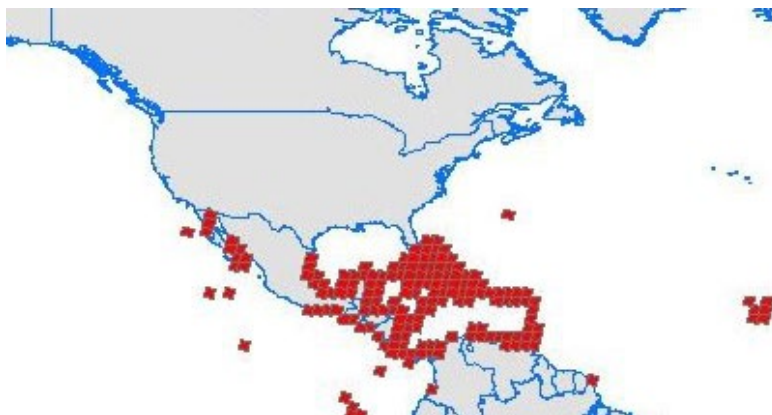
5 August 2023: “Coral bleaching is already well underway in parts of the Eastern Pacific, Caribbean, and Gulf of Mexico.

Red shading (Alert Level 1) means “significant bleaching likely,” and dark red shading (Alert Level 2) means “severe bleaching and significant mortality likely.” —[Colin McCarthy](#)

NOAA Coral Reef Watch 5km Bleaching Alert Area Year-to-date Maximum (v3.1) 3 Aug 2023

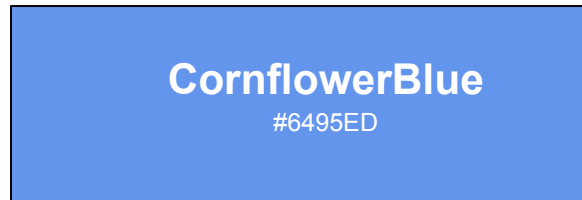


5 August 2023: “Here’s a map of the coral reefs in the Eastern Pacific, Caribbean, and Gulf. 25% of marine life is estimated to rely on coral reefs, making them one of if not the most important ecosystems in the ocean.” —[Colin McCarthy](#)



CornflowerBlue

keyword: HTML color name



Cornsilk

keyword: HTML color name



corr

keyword: COBOL reserved word (z/OS)

corresponding

keyword: SQL reserved word (z/OS)

keyword: COBOL reserved word (z/OS)

cos

function: C math.h library function: stands for COSine

COS(x)

keyword: PL/I keyword

Built-in function

COSD(x)

keyword: PL/I keyword

Built-in function

cosh

function: C math.h library function: stands for COSine Hyperbolic

COSH(x)

keyword: PL/I keyword

Built-in function

Costa Mesa bully

Note that the Costa Mesa buly is a different person than the Costa Mesa thief, even though the Costa Mesa buly is also a thief.

I am writing this to say the many things I would have liked to have been able to say in person during the years the Costa Mesa bully had an office next to the one where I worked.

Of course we wouldn't have gotten to this paragraph because the mere mention of the word "bully" would generate you yelling obscenities and insults for several hours. You would continue the angry shouting for hours after I gave up trying to talk with you and locked the office door to prevent any physical violence.

asdf

asdf

asdf

asdf

asdf

asdf

The first question is: is the Costa Mesa bully actually a bully?

He gets extremely angry at being called a bully and will often shout obscenities through the walls for one to four hours afterwards.

His initial response is that he isn't a bully, that I'm projecting, and that I am the bully.

When I ask for examples of how I am being a bully (because I would like to stop any and all bullying activity), the only examples are cases where he gave me orders to do something he wanted done and I declined to do the thing, and that was me bullying him into having to do the thing himself. I could be wrong, but I don't think that's what bullying means.

When he asks me for examples of what I think are him being a bully, he angrily states that none of these things are true. He claims that I am hallucinating, that I am a fiction machine, and that I am making these things up just to hurt his feelings. My list includes: physical violence, theft, ordering me and others around, approaching me and others in a physically threatening manner, shouting obscenities in person and then through the walls for hours (the longest being 7-1/2 hours), making up false negative lies about me and others, making up false positive things about himself, denying ever having done anything wrong, claiming that he is the most perfect light being that we will ever meet, claiming that he was child abused by hundreds of people (parents, siblings, teachers, fellow students, principals, and even two school psychiatrists), lots of little personal insults, refusing to allow others to respond to his accusations, and dominating conversations (I have timed conversations I've heard him have with others and he speaks an average of a little more than 90% of the time and gets angry when others want to contribute to the conversation).

I am pretty certain that he is a bully.

I have had the misfortune of having to work in an office next to a bully.

Normally I try to avoid bullies. This time I can't.

My goal here is to summarize my observations of what a bully is like.

So after his arrival, my first encounter was the bully spending 45 minutes complaining about having been abused as a child.

The bully strongly objected to anyone else (there were five of us there) speaking.

At first I accepted the child abuse as fact, but I started to notice that the bully's discussion of child abuse didn't include any of the things from my own experience or the experiences of others.

Over time, the bully revealed that the child abuse was done by his parents, all of his siblings, the teachers at multiple schools, the other children at multiple schools, and psychologists at two different schools. That's a large scale coordinated campaign of child abuse.

Further, the bully revealed that all of his child abuse was others wrongly accusing him of violence, theft, bullying, narcissism, and other similar claims, all of which were in his presentation were never true.

The bully freely admitted that all of the child abuse was just claims that the bully had done something wrong. The bully admitted there was never any physical violence or sexual assault. The bully firmly and repeatedly states that physical violence is minor compared to “damaging words”.

I faced a lot of bullying until high school. I was a premature baby and very small for my age until the summer before high school and therefore a target of bullies. My mother was highly abusive of my sisters and me (in ways that I keep hearing others who faced child abuse also experiencing). When I was a child I was repeatedly over years sexually assaulted by a male relative.

I am highly suspicious of the bully's claims of child abuse. It sounds to me that what he perceived as child abuse was simply other people pointing out that he was a bully.

Costa Mesa thief

Note that the Costa Mesa thief is a different person than the Costa Mesa bully, even though the Costa Mesa bully is also a thief.

Thieves will be thieves. It is in their nature. This is my experience with one particular thief.

I will not be revealing the name of the thief. I am calling him the Costa Mesa thief because that is where I met him.

I first met him because he dealt large quantities of cannabis to a friend of mine, Michael M.

One day I was walking down the street and he pulled up next to me and offered me a ride. I got into his car.

He said that he had to take a detour and started travelling back and to the side from the path I had been on.

He pulled up next to a car on a side street and handed me a remote grabbing tool and then told me to use it to steal the keys off the middle panel in the car.

I objected. He said he had been watching the guy for a long time, the car owner was a “bad rich guy“, and this was his opportunity to make a copy of the guy’s key so he could break into his house.

This all had obviously been his plan whne he spotted me.

I refused to steal. He got angry, stole the keys himself, and told me to get out of his car because he needed to rush to make copies of the keys and return them before the car owner got out of a meeting.

I ended up walking a long distance just to get back to where I had been picked up and offered a ride.

I told michaelm about this incident, but michelm didn’t believe me.

This particular thief bragged about making hundreds of thousands of dollars a year selling cannabis and not paying any taxes. He claimed to have a bunch of gold stored in a variety of places.

The worst incident happened several years after the first incident.

I was behind on paying the rent on my storage unit. michaelm said that the thief would help out.

The thief negotiated a deal with the storage place to pay 1/3 of the owed rent and I got 72 hours to get moved out. The thief paid that money and money for the new storage place and offered to transport everything in his truck.

During the moving, the thief looked through every box, which I thought was incredibly nosy, but I needed his help. He would often ask me what was valuable in the box, which should have been a red flag.

When he saw the boxes with the tapes, hard drives, and various digital media, he offered to take it all to salvage and sell it for the iron. I said no.

The moving was done fast, in a rush.

As we were finishing up, he revealed tht he had contacted my sisters and that they were going to pay for the entire move. This was a surprise to me. I don’t even know how he got contact info on my sisters. Maybe he say a name and phone number. He sid he was padding the bill and asked if I wanted him to add an extra \$100 for me. I said no.

I contacted my sisters and let them know he was planning on padding the bill. He charged them the full price on the old rental space (not the 1/3 he paid), the new rental space, his gas, and some other charges.

He did make a strange comment at the end. He said, “don’t worry, everything is there.”

That prompted me to go through every box and check. he had stolen every box that I had identified as having something valuable, as well as all of the boxes containing media with iron.

That included tapes of almost every show my band did (mostly audio, some video), tapes of almost every rehearsal, tapes of new unfinished songs, tapes from other obscure unsigned bands, tapes of an entire campaign of D&D game play, tapes of programming I’d done going back to the 1960s, including for DEC, IBM, CDC, and Sperry Rand minicomputers and mainframes.

That included the vast majority of my hard drives, as well as floppy disks (of all three sizes), Zip drives, and other digital media. That included almost my entire programming career, as well as artwork, music, and materials donated to me by artists, musicians, programmers, engineers, Egyptologists, professors, etc.

The lesson is to avoid thieves. Like scorpions, it is their nature.

cottage cheese

Cottage cheese is very high in protein per calorie.

count

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

COUNT(file-name)

keyword: PL/I keyword

Built-in function

COUNTER

keyword: PL/I keyword

Built-in function

counting

“The number of finger joints on each hand (excluding the thumb) makes it possible to count to 12 by using the thumb.

Egyptians and Babylonians were fond of counting in base twelve like this and this is basically why we have 24 hours in a day and 60 minutes in an hour.” —[Massimo](#)



COVID

“You’re willing to walk among us unvaccinated, you are the enemy.” —Gene Simmons

“Don’t have the vaccine, can’t go to the supermarket... Can’t go to the ballgame... Can’t go to work... No shirt, no shoes, no service!” —Don Lemon

“Who gets an ICU bed? Vaccinated person, come right in. Unvaccinated person who gobbled horse poo... Rest in peace, wheezy/” —Jimmy Kimmel

“Love the idea of COVID vaccine passports for everywhere: flights, clubs, gyms, shops. It’s time COVID denying, anti-vaxxer loonies had their bullshit bluff called.” —Piers Morgan

“When are we gonna stop putting up with idiots in this country and just say it’s mandatory to get vaccinated? Fuck em’, fuck their freedom.” —Howard Stren

“Screw your freedom!” —Arnold Schwarzenegger

“How can we get food to them? Well, that’s actually their problem.” —Noam Chomsky

31 October 2020: “President Trump still has no plan to address COVID-19.

He quit on you, on your family, on America. He just wants us to grow numb to the horrors of the death toll and the pain.

We cannot afford another four years of his failed leadership.” —[Joe Biden](#)

NOTE: Biden ended up mostly following Trump’s policy, but in an even more lackluster manner, and then cancelled emergency help for the public.

18 March 2023: “Mass COVID infection as policy, as recommended by fringe, right-wing scientists, was the worst crime against this country in generations.

More than a million dead and millions more left suffering long-term health issues...and for what? The economy.

A deeply sick agenda.

More than 250K American kids have lost a caregiver or parent to this virus.

U.S. life expectancy dropped.

Communities of color hit the hardest.

But some folks could not see beyond shareholder value, their own pocketbooks, and, worst of all, career opportunities.” —[Walter Bragman](#)

19 March 2023: “COVID minimizers say public health measures to limit viral spread were an assault on freedom. They demanded an immediate return to normalcy.

But the freedom they describe is entirely employer-side.

What freedom do workers have without workplace protections?

Workers today lack recourse if they get sick on the job because their employer hasn’t taken basic steps to make the workplace COVID safe.

They don’t have guaranteed paid leave, health care, or disability waiting for them if they get

long COVID.

But consider shareholder value!

Worker safety should never be left to the whims of employers. Yet, that's exactly the scenario COVID minimizers have been pushing.

Who does it serve? Wealth.

Throughout this pandemic, we've seen working class people—primarily working class people of color get hit hardest.

When people say no new workplace safety standards are necessary, they're telling you exactly what side they're on and what their values are.” —[Walter Bragman](#)

7 August 2023: “I just can't believe that 3 years into the pandemic we are worst off than in 2020. More death, more preventable disabilities, no data, no mask mandates, vaccines are waning and aren't tailored to new variants, no HEPA filters, NOTHING

It's not normal to be sick all the time!!

A lot of us are still being safe and trying to avoid Covid at all costs, but so many of you are willingly letting our governments kill us off?

WHY? Brunch? Stupid ass shows? It better be worth it because you'll remember that one outing as the one that disabled you. Wake up ffs!!

I am so angry and tired that people are letting this happen. Because yes, your apathy is contributing to this. With governments doing whatever the fuck they want since you've all let them.

There is more interest in fucking aliens than being safe from a level 3 pathogen. FFS!!” —[Hanner](#)

7 August 2023: “COVID is still transmitting at an alarming rate, but the pandemic is over. 1 in 10 people are being diagnosed with Long COVID, but the pandemic is over. In order to meet the president of the U.S. you have to get tested, but the pandemic is over. Remind me what “over” means again?” —[Briana Mills, LMFT](#)

7 August 2023: “We're watching our species commit slow-motion mass suicide.

People dying slowly & silently from constant reinfection of a novel pathogen they've decided to ignore while the planet burns and boils.

Is anyone else utterly gobsmacked by the historical implications of this?” —[Kate Spitzmiller](#)

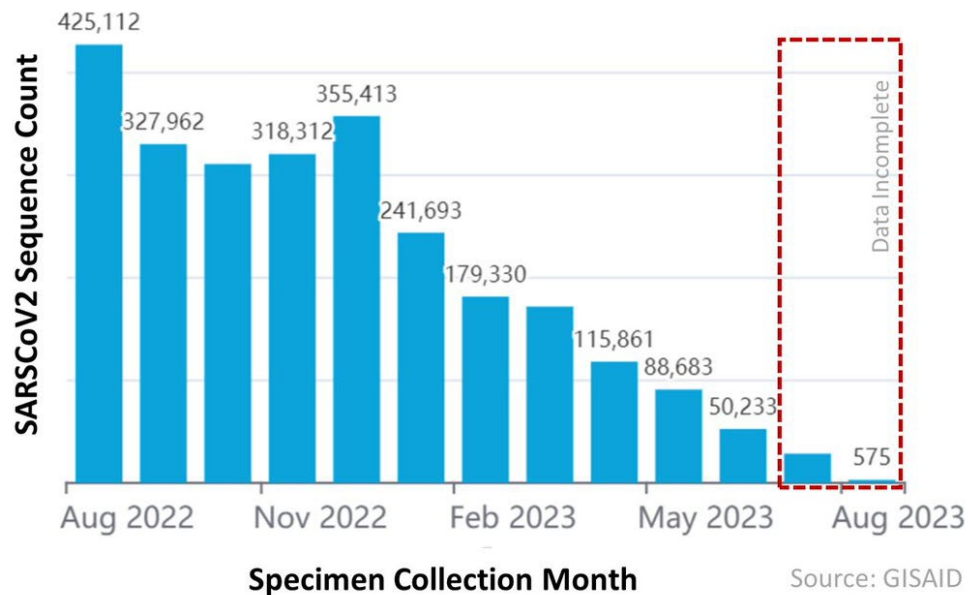
13 August 2023: “I learned today via FDA why and when the new Covid boosters will be ready

—The reason for the delay is that the Covid Public Health Emergency ended May 11, 2023, so it requires a Product Licensing Application (PLA) instead of an EUA —Now projected to be available ~9/15 ” —[Eric Topol](#)

14 August 2023: “Status of Genomic Surveillance in the World

Global genomic surveillance is significantly down & the negative impact of Global & National Emergency End Declarations is evident!

Source: GISAID” —[Raj Rajnarayanan](#)



20 August 2023: “Ending the emergency phase of the pandemic has contributed to a drop in genomic surveillance, further reduced willingness to implement mitigation measures, and delayed approval of updated vaccines. Remember that as fall hits.” —[T. Ryan Gregory](#)

30 August 2023: “Stranger: (fake coughs loudly upon seeing me in a mask)

Me: Are you ok

Stranger: Yeah

Me: You should probably see a doctor for that fake cough

Stranger: What

Me: Faking symptoms of illness for attention could be a sign of Munchausen Syndrome, a serious psychological disorder” —[Guinness Pig](#)

31 August 2023: “Studies show that the Covid vaccines are highly effective against low and moderate exposures.

Just not against high exposures.

Air filtration (including masks) will reduce most high exposures to moderate or low.

Some of us have avoided infection using these methods.” —[Stephanie Voltolin](#)

29 December 2023: “I only go by my personal experience. I have a pacemaker and a heart arrhythmia. I’ve been masked since the beginning and gotten boosters and I have never gotten CoVid. My father in law went on a cruise in October around a plethora of unmasked people, got CoVid and Pneumonia and almost died. He was in ICU for 2 weeks. Everyone is different and their experiences different but it's easy for me to mask so that's what I will do. Your mileage will vary.” —[Cosmic Cowboy](#)

See: cow milk

CP-6

operating system

Proprietary OS by Honeywell

CPC Coding scheme

abbreviation

programming language

year created: 1948

created by: Howard H. Aiken

predecessors: Analytical Engine order code

See: CPLN — PL/I

See: CPLX — PL/I

CP/M

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

The original CP/M ran on Intel 8080/8085 and Zilog Z80. — [Wikipedia: List of operating systems](#)

Also the name used with an entire family of operating systems.

CP/M 2.2

abbreviation

operating system

Proprietary OS by Amstrad

CP/M

CP/M-68K

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

CP/M for Motorola 68000. —[Wikipedia: List of operating systems](#)

CP/M

CP/M-86

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

CP/M-86 CP/M for Intel 8088/8086 —[Wikipedia: List of operating systems](#)

CP/M

CP/M-86 Plus

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

CP/M-86 CP/M for Intel 8088/8086 for BDOS 3.0 — [Wikipedia: List of operating systems](#)

CP/M

CP/M-8000

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

CP/M-8000 CP/M for Zilog Z8000 — [Wikipedia: List of operating systems](#)

CP/M

CP/M Plus

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

Proprietary OS licensed by Amstrad

CP/M for Intel 8080/8085 and Zilog Z80 with BDOS 3.0 — [Wikipedia: List of operating systems](#)

CP/M

See: .cpt — file extension

CPU

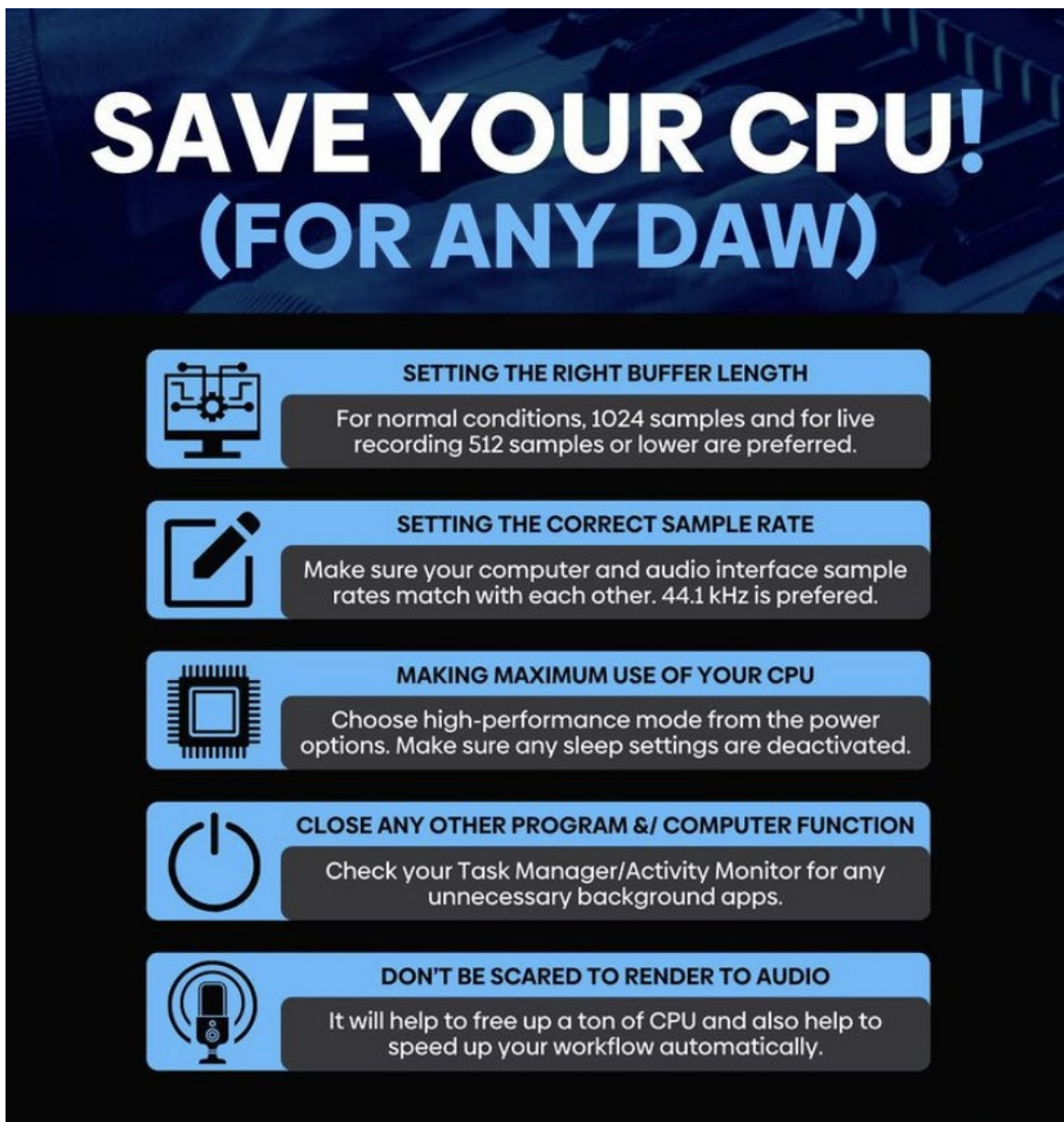
abbreviation

Central Processing Unit: the central computational and control unit of a computer system, the CPU interprets and executes the instructions, performs the basic operations of the system, exchanges data with the system's memory and/or peripherals, and manages the system's other components.

Synonym processor

CPU (audio)

8 October 2023: “audio cpu cheat sheet” — [Solar Heavy](#)




16 January 2024: “Use CPU more efficiently

· This will work in any DAW.

If you don't have a powerful machine that can handle any of your sessions seamlessly, you should definitely consider using “freezing” on tracks that you have finished working with

Your DAW will render those tracks and they won't be processed in real time no more, saving CPU power for real time processing on the tracks you still working on

If you will need to get back and adjust something on these tracks, you always can “unfreeze” them. All your plugins with settings will be restored and available to tweak.” —[nathaniel W.](#)

See: .cr2  — file extension

See: cranberry juice

create

keyword: SQL reserved word (ANSI, Oracle)

See: .crf — file extension

Crime Bill of 1994

Joe Biden wrote the 1994 Crime Bill.

Crimson

keyword: HTML color name



Cromemco DOS (CDOS)

operating system

Proprietary OS by Cromemco.

A disk operating system compatible with CP/M. — [Wikipedia: List of operating systems](#)

CP/M

Cromix

operating system


Proprietary OS by Cromemco.

A multitasking, mutli-user, Unix-like OS for Cromemco microcomputers with Z80A and/or 68000 CPU. — [Wikipedia: List of operating systems](#)

cross cinch


Kannuki (Cross Cinch): A technique used to secure wraps in place, typically in Gote Shibari.


See also: shibari

See: .crw  — file extension

Crypto

keyword: Crypto (initial cap) JavaScript windows object

See: .csh  — file extension

See: .csl  — file extension

See: CSTG — PL/I

See: .csv — file extension

See: CTL

CTL360

keyword: PL/I keyword

Option of ENVIRONMENT attribute

CTLASA

keyword: PL/I keyword

Option of ENVIRONMENT attribute

CTOS

abbreviation

operating system

Proprietary OS by Datapoint.

Cassette Tape Operating System for the Datapoint 2200. — [Wikipedia: List of operating systems](#)

See: CTSS — operating system

Cuba

nation

Invaded by mercenary forces recruite, organized, financed, and directed by the United States 1961.

current

keyword: SQL reserved word (ANSI, Oracle)

cupboard

There is evidence that humans used wooden cupboards to protect food and fire wood from rain and animals as early as 300,000 years ago.

current_date

keyword: SQL reserved word (z/OS)

CURRENTSTORAGE(variable)

keyword: PL/I keyword

Abbreviated: CSTG

Built-in function

current_time

keyword: SQL reserved word (z/OS)

current_timestamp

keyword: SQL reserved word (z/OS)

currency

keyword: COBOL reserved word (z/OS)

Curry notation system

programming language

year created: 1948

created by: Haskell Curry

predecessors: ENIAC coding system

cursor

keyword: SQL reserved word (z/OS)

Cyan

keyword: HTML color name



Cymatics Deja Vu

12 October 2023: “Cymatics dropped a free plugin this morning called Deja Vu which lets you time stretch anything, making some cool layer and pad sounds

it has that ability and also this nice washed out melty/warm reverb layer going on, it kinda melts it down and gives you some great control” —[Solar Heavy](#); [product link](#)



See: cysteine

D d

D

ASCII: 44 hex

UNICODE: LATIN CAPITAL LETTER D

d

ASCII: 64 hex

UNICODE: LATIN SMALL LETTER D

D

keyword: PL/I keyword

Option of ENVIRONMENT attribute

dagger

noun “A knife or instrument, with or without a hand guard, capable of ready use as a stabbing weapon, that may inflict great bodily injury or death (Penal Code Section 16470)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

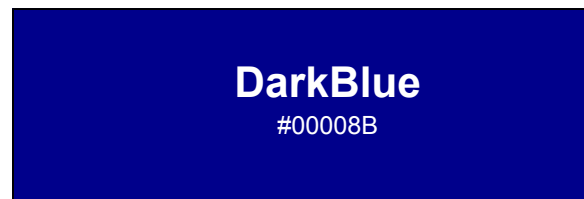
See: dairy foods

Damascus

Damascus, Syria, is about 6,300 years old.

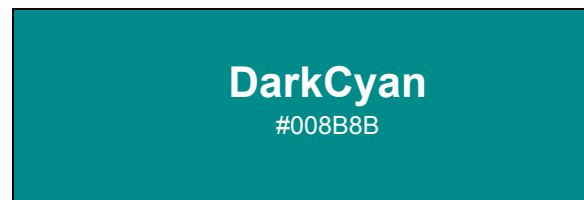
DarkBlue

keyword: HTML color name



DarkCyan

keyword: HTML color name



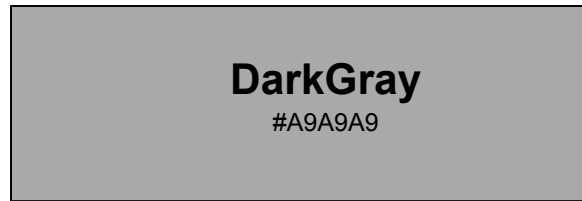
DarkGoldenRod

keyword: HTML color name



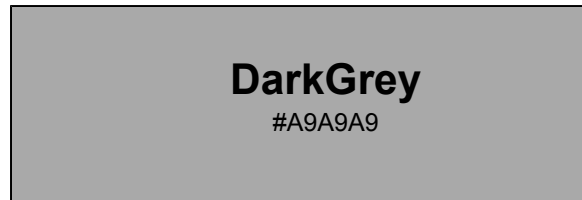
DarkGray

keyword: HTML color name



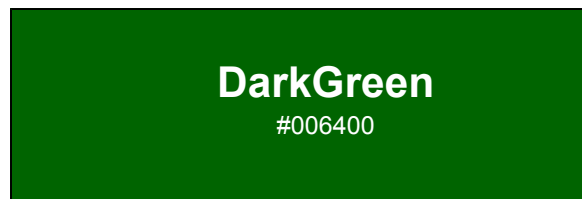
DarkGrey

keyword: HTML color name



DarkGreen

keyword: HTML color name



DarkKhaki

keyword: HTML color name



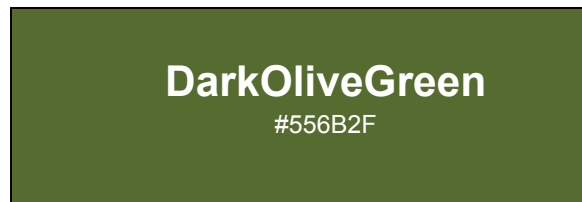
DarkMagenta

keyword: HTML color name



DarkOliveGreen

keyword: HTML color name



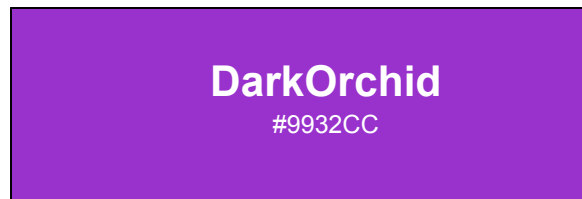
DarkOrange

keyword: HTML color name



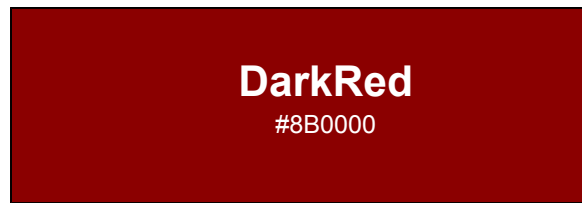
DarkOrchid

keyword: HTML color name



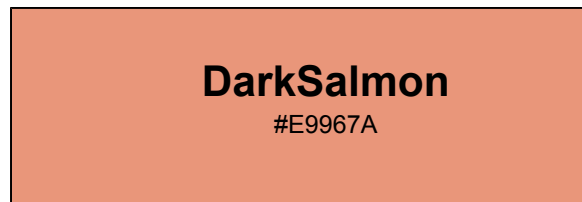
DarkRed

keyword: HTML color name



DarkSalmon

keyword: HTML color name



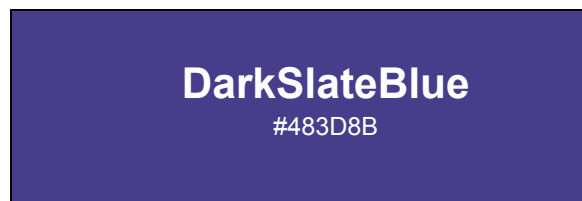
DarkSeaGreen

keyword: HTML color name



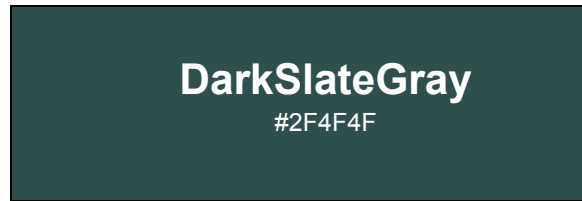
DarkSlateBlue

keyword: HTML color name



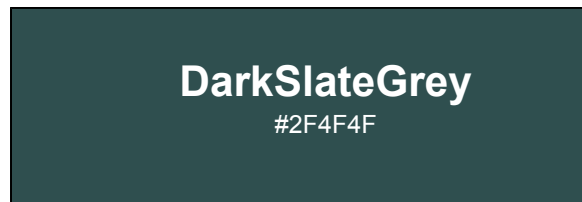
DarkSlateGray

keyword: HTML color name



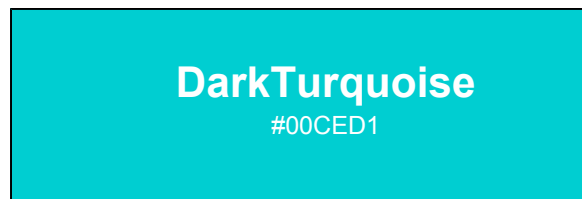
DarkSlateGrey

keyword: HTML color name



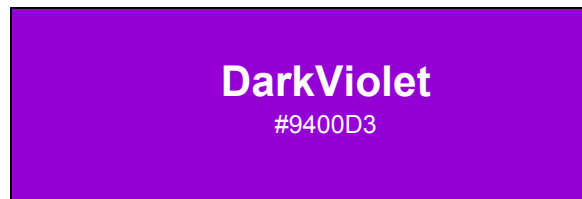
DarkTurquoise

keyword: HTML color name



DarkViolet

keyword: HTML color name



See: [.dash](#) — file extension

See: **.dat (data)** — file extension

See: **.dat (video)**  — file extension

data

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle)

DATA

keyword: PL/I keyword

Stream I/O transmission mode

DATAFIELD

keyword: PL/I keyword

Built-in function

Datapac Multiuser DOS

operating system

Proprietary OS by Digital Research, Inc.

DOS

Datapac System Manager

operating system

Proprietary OS by Digital Research, Inc.

a derivative of Datapac Multiuser DOS — [Wikipedia: List of operating systems](#)

DOS

dataxel

keyword: SQL reserved word (z/OS)

date

keyword: JavaScript object

keyword: SQL reserved word (z/OS)

DATE

keyword: PL/I keyword

Built-in function

date-compiled

keyword: COBOL reserved word (z/OS)

date-written

keyword: COBOL reserved word (z/OS)

Angela Davis

“In a racist society it is not enough to be non-racist. We must be anti-racist.” —Angela Davis

day

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

day care center

noun “Any facility designed to provide recreational programs for persons under the age of 18 years (Health and Safety Code Section 1596.76)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

day-of-week

keyword: COBOL reserved word (z/OS)

DB

keyword: PL/I keyword

Option of ENVIRONMENT attribute

See: .db — file extension

See: .dbf — file extension


dbcs

keyword: COBOL reserved word (z/OS)

dbms_in_memory

keyword: SQL reserved word (z/OS)

See: DCL — PL/I

See: .dcr  — file extension

See: .dds  — file extension

de

keyword: COBOL reserved word (z/OS)

deadly weapon

noun “Any weapon, when used in such a manner (offensively or defensively) capable of producing, and likely to produce, death or great bodily injury” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

deadskin

the main ingredient of household dust is dead human skin cells. According to the Imperial College London, humans shed an average of 200 million skin cells per hour.

death penalty

Joe Biden supports the death penalty.

See: `.deb` — file extension

Eugene Debs

Democratic President Woodrow Wilson called Eugene V Debs a “traitor to the country.”

Debs was indicted and convicted under the same Espionage Act being used against Julian Assange for making speeches that criticized President Wilson and World War I.

Debs ran for president from prison and won more than a million votes.

Debs' speech prior to sentencing:

Your Honor,

years ago I recognized my kinship with all living beings, and I made up my mind that I was not one bit better than the meanest on earth. I said then, and I say now, that while there is a lower class, I am in it, and while there is a criminal element I am of it, and while there is a soul in prison, I am not free.

If the law under which I have been convicted is a good law, then there is no reason why sentence should not be pronounced upon me. I listened to all that was said in this court in support and justification of this prosecution, but my mind remains unchanged. I look upon the Espionage Law as a despotic enactment in flagrant conflict with democratic principles and with the spirit of free institutions.

Your Honor, I have stated in this court that I am opposed to form of our present Government; that I am opposed to the social system in which we live; that I believed in the change of both—but by perfectly peaceable and orderly means.

Let me call your attention to the fact this morning that in this system five per cent of our people own and control two-thirds of our wealth; sixty-five per cent of the people, embracing the working class who produce all wealth, have but five per cent to show for it.

Standing here this morning, I recall my boyhood. At fourteen I went to work in a railroad shop; at sixteen I was firing a freight engine on a railroad. I remember all the hardships and privations of that earlier day, and from that time until now my heart has been with the working class. I could have been in Congress long ago. I have preferred to go to prison. The choice has been deliberately made. I could not have done otherwise. I have no regret.

In the struggle, the unceasing struggle, between the toilers and producers and their exploiters, I have tried, as best I might, to serve those among whom I was born, with whom I expect to share my lot until the end of my days.

I am thinking this morning of the men in the mills and factories; I am thinking of the men in the mines and on the railroads; I am thinking of the women who, for a paltry wage, are compelled to work out their lives; of the little children, who in this system, are robbed of their childhood, and in their early, tender years are seized in the remorseless grasp of Mammon, and forced into the industrial dungeons, there to feed the machines while they themselves are being starved body and soul. I see

them dwarfed, diseased, stunted, their little lives broken, and their hopes blasted, because in this high noon of our twentieth century civilization money is still so much more important than human life. Gold is god and rules in the affairs of men.

The little girls, and there are a million of them in this country, this, the most favored land beneath the bending skies, a land in which we have vast areas of rich and fertile soil, material resources in inexhaustible abundance, the most marvelous productive machinery on earth, millions of eager workers ready to apply their labor to that machinery to produce in abundance for every man, woman, and child—and if there are still vast numbers of our people who are the victims of poverty and whose lives are an unceasing struggle all the way from youth to old age, until at last death comes to their rescue and stills the aching heart, it is not the fault of the Almighty, it cannot be charged to nature, but it is due entirely to the outgrown social system that ought to be abolished, not only in the interest of the working class, but in a higher interest of all humanity.

I think of these little children, the girls that are in the textile mills of all description in the east, in the cotton factories of the south, I think of them at work in a vitiated atmosphere, I think of them at work when they ought to be at play or at school, I think that when they do grow up, if they live long enough to approach the marriage state, they are unfit for it. Their nerves are worn out, their tissue is exhausted, their vitality is spent. They have been fed to industry. Their lives have been coined into gold. Their offspring are born tired. That is why there are so many failures in our modern life.

Your Honor, the five per cent of the people that I have made reference to constitute that element that absolutely rules our country. They privately own all our public necessities. They wear no crowns; they wield no scepters, they sit upon no thrones; and yet they are our economic masters and our political rulers. They control this Government and all of its institutions. They control the courts.

And Your Honor, if you will permit me, I wish to make just one correction. It was stated here that I had charged that all federal judges are crooks. The charge is absolutely untrue. I did say that all federal judges are appointed through the influence and power of the capitalist class and not the working class. If that statement is not true, I am more than willing to retract it.

The five per cent of our people who own and control all of the sources of wealth, all of the nation's industries, all of the means of our common life, it is they who declare war. It is they who make peace. It is they who control our destiny. And so long as this is true, we can make no just claim to being a democratic government, a self-governing people.

I believe, Your Honor, in common with all Socialists, that this nation ought to own and control its own industries. I believe, as all Socialists do, that all things that are jointly needed and used ought to be jointly owned—that industry, the basis of life, instead of being the private property of the few and operated for their enrichment, ought to be the common property of all, democratically administered in the interest of all.

John D. Rockefeller has today an income of sixty million dollars a year, five million dollars a month, two hundred thousand dollars a day. He does not produce a penny of it. I make no attack upon Mr. Rockefeller personally. I do not in the least dislike him. If he were in need, and it were in my power to serve him, I should serve him as gladly as I would any other human being. I have no quarrel with Mr. Rockefeller personally, nor with any other capitalist. I am simply opposing a social order in which it is possible for one man who does absolutely nothing that is useful, to amass a fortune of hundreds of millions of dollars, while millions of men and women who work all of the days of their lives secure barely enough for existence.

This order of things cannot always endure. I have registered my protest against it. I recognize the feebleness of my effort, but, fortunately, I am not alone. There are multiplied thousands of others who, like myself, have come to realize that before we may truly enjoy the blessings of civilized life, we must reorganize society upon a mutual and cooperative basis; and to this end we have organized a great economic and political movement that spreads over the face of all the earth.

There are today upwards of sixty millions of Socialists, loyal, devoted adherents to this cause, regardless of nationality, race, creed, color, or sex. They are all making common cause. They are spreading the propaganda of the new social order. They are waiting, watching, and working through all the hours of the day and night. They are still in the minority. But they have learned how to be patient and to bide their time. They feel they know, indeed, that the time is coming, in spite of all opposition, all persecution, when this emancipating gospel will spread among all the peoples, and when this minority will become the triumphant majority and, sweeping into power, inaugurate the greatest social and economic change in history.

In that day we shall have the universal commonwealth—not the destruction of the nation, but, on the contrary, the harmonious cooperation of every nation with every other nation on earth. In that day war will curse this earth no more.

I have been accused, Your Honor, of being an enemy of the soldier. I hope I am laying no flattering unction to my soul when I say that I don't believe the soldier has a more sympathetic friend than I am. If I had my way, there would be no soldiers. But I realize the sacrifice they are making, Your Honor. I can think of them. I can feel for them. I can sympathize with them. That is one of the reasons why I have been doing what little has been in my power to bring about a condition of affairs in this country worthy of the sacrifices they have made and that they are now making in its behalf.

Your Honor, in a local paper yesterday there was some editorial exultation about my prospective imprisonment. I do not resent it in the least. I can understand it perfectly. In the same paper there appears an editorial this morning that has in it a hint of the wrong to which I have been trying to call attention. [He reads:]

A Senator of the United States receives a salary of \$7,500 to \$45,000 for the six years for which he is elected. One of the candidates for Senator from a state adjoining Ohio is reported to have spent through his committee \$150,000 to secure the nomination. For advertising he spent \$35,000; for printing \$30,000; for traveling expenses \$10,000, and the rest in ways known to political managers.

The theory is that public office is as open to a poor man as to a rich man. One may easily imagine, however, how slight a chance one of ordinary resources would have in a contest against this man who was willing to spend more than three times his six years' salary merely to secure a nomination. Were these conditions to hold in every state, the Senate would soon become again what it was once held to be, a rich men's club.

Campaign expenditures have been the subject of much restrictive legislation in recent years, but it has not always reached the mark. The authors of primary reform have accomplished some of the things they set out to do, but they have not yet taken the bank roll out of politics.

They never *will* take it out of politics, they never can take it out of politics, in this system.

Your Honor, I wish to make acknowledgment of my thanks to the counsel for the defense. They have not only defended me with exceptional legal ability, but with a personal attachment and devotion of which I am deeply sensible, and which I can never forget.

Your Honor, I ask no mercy. I plead for no immunity. I realize that finally the right must prevail. I never so clearly comprehended as now the great struggle between the powers of greed on the one hand and upon the other the rising hosts of freedom.

I can see the dawn of a better day for humanity. The people are awakening. In due course they will come to their own.

When the mariner, sailing over tropic seas, looks for relief from his weary watch, he turns his eyes

toward the southern cross, burning luridly above the tempest-vexed ocean. As the midnight approaches, the southern cross begins to bend, and the whirling worlds change their places, and with starry finger-points the Almighty marks the passage of time upon the dial of the universe, and though no bell may beat the glad tidings, the lookout knows that the midnight is passing and that relief and rest are close at hand.

Let the people everywhere take heart and hope everywhere, for the cross is bending, the midnight is passing, and joy cometh with the morning.

Your Honor, I thank you, and I thank all of this Court for their courtesy, for their kindness, which I shall remember always.

I am prepared to receive your sentence.

“The worker who votes the Republican or Democratic ticket does worse than throw his vote away. He is a deserter of his class and his own worst enemy.” —Eugene Debs

“Both the Republican and Democratic parties reek with corruption in their servility to the capitalist class, and both are torn with strife in their mad scramble for the spoils of office.” —Eugene Debs

“You are satisfied with too little. The average worker with a wage that will keep body and soul together is content, and he is told he is blessed to be content. I am doing what little I can to incite him to discontent. Intelligent discontent is the torchbearer of civilization.” —Eugene Debs

“Ten thousand times has the labor movement stumbled and bruised itself. We have been enjoined by the courts, assaulted by thugs, charged by the militia, traduced by the press, frowned upon in public opinion, and deceived by politicians. But notwithstanding all this and all these, labor is today the most vital and potential power this planet has ever known, and its historic mission is as certain of ultimate realization as is the setting of the sun.” —Eugene Debs

debt ceiling 2023

“The debt ceiling argument is all theater. They’ll come to a pre-planned 11th hour agreement where they’ll give their donors everything they asked for. Democrats will pretend they fought hard but had no choice in the end.” —[Ibara Eleven](#)

“Joe’s gotta be feeling pretty chuffed. Poor people are getting crushed and weapons manufactures are getting fucked, good times all around!” —[mousdrv](#)

“Biden’s debt deal: A bipartisan blueprint for war and austerity” —[Biden’s Ukrainian Pension Fund](#)

More than 1.2 million American military veterans rely on food stamps to survive. More than 22,000 American soldiers rely on food stamps to survive and an even bigger number don’t even

know they are eligible. Whenever Joe Biden talks about veterans or active duty members of the US military he always emphasizes how the government sacrifices them. He uses the literal word sacrifice.

“This fiscal austerity would become a core conviction of Biden’s and help animate a lifelong belief that compromise and reaching across the aisle are the perennial solution to what ails America.” — [Holding Biden Accountable \(From The Left\)](#)

“Biden is giving Republicans exactly what they want, even when he doesn’t have to, and then he’s gloating about it” — [Holding Biden Accountable \(From The Left\)](#)

2 June 2023: “Consider that SNAP (i.e., food stamps) is a de facto subsidy for the agriculture industry. As part of the Farm Bill, the program keeps supply chains afloat for the agriculture industry and grocery stores. Instead of increasing access to food stamps during a time when millions of Americans are struggling to afford groceries, we are needlessly restricting access to it by adding more byzantine requirements to qualify. What happens when millions of people can’t afford food? Corporations supplying the food will raise prices to compensate for the loss to their profit margins. This is also known as inflation. In addition to new restrictions on food stamps, millions of students will now face increased financial hardship with the resumption of interest payments. 43 million people in the US carry student debt, with ~\$1.75 trillion outstanding. Consider that when the unemployment insurance benefits from COVID expired in September 2021, inflation increased soon after that; millions of Americans were in financial hardship. Inflation happens when corporations maintain their profit margins to account for lost sales.” — [Friesein](#)

“The deal automatically greenlights federal permits for pipeline construction — and exempts it from judicial review.” — [David Sirota](#)

“Democrats did not add their long-promised \$15 minimum wage or public health insurance option into the debt deal. Instead, they added a massive fossil fuel pipeline to the deal, after the pipeline company funneled cash to Democratic senators. I want you to take a moment to think about that.” — [David Sirota](#)

“Wait a minute, they’re retroactively adding 3 years of interest that they’ve been saying all along would not accrue??” — [Nurse D, Gardening Fool](#)

“Democrats could have added the \$15 wage to the debt deal. They didn’t. Instead, Joe Manchin got a pipeline. “They don’t care about us” is too weak a conclusion. They’re literally openly mocking us.” — [Professor Anthony Zenkus](#)

For what it is worth, the Democratic Party cheering for destruction of the environment and yanking food (fucking, food) from the poor shows that they are unambiguously just as extreme far right fascist as any Republican. I haven’t given up on trying to reach them, but their lack of human compassion is appalling.

“All the cult members who think Biden actually won in the debt limit game show, seem to forget that lot was given up and the same game is coming up in a year and Biden will win again by cutting some more of social net and more environmental catastrophic project.”

—[RepDemOligarchy](#)

2 June 2023: “Nearly every democrat voted to cut SNAP benefits and fast track oil and gas projects like the Mountain Valley Pipeline. Lesser evil doesn’t exist.” —[Birriion](#)

“The Senate a passed a [debt relief] bill that blocks student loan forgiveness, but that’s not all. Borrowers now have to pay retroactive payments along w/ accumulated interest that occurred during the pause.” —[Thia Ballerina](#)

“Agreeing to any cuts to social services while also raising the military budget to record levels is a right wing position. The two major parties may not be identical, but they are both right wing.” —[Professor Anthony Zenkus](#)

“Remember, Biden already cut millions from food assistance and health insurance in March! Those folks were not even part of the conversation. They could have returned those people to being able to eat! Why do people fall for these choreographed, Republican/Democrat stage plays?” —[Jaha Hughes](#)

“Debt Limit Bill passes w/Dem majority support. A \$56B military spending increase, additional pipelines, more oil and gas drilling permits...a climate catastrophe- while cutting social programs for the working class, during a 40 year-high inflation.” —[Thia Ballerina](#)

“Democrats really kicking off the 2024 election cycle on a great note booting millions of Medicaid, slashing SNAP benefits, restarting student loan payments while funding more gas & oil pipelines. Good luck with that strategy.” —[Springtime for Hitler Particles](#)

“You might not get your benefits next month. That is a very real possibility right now. What would you do if the foodstamps, the disability, the social security never came in?” —[Soup](#)

“If you’re on foodstamps, gather your resources now. If you’re on Medicaid, get your pressing health issues dealt with now. Make sure you have a plan for what to do if you and your family cannot afford essentials. Talk about pooling resources with the people around you.” —[Soup](#)

“There isn’t any option that's great. Republicans are doing this to make Biden look bad in an election year, and whatever happens, the American people are going to feel the brunt of their shitty political game.” —[Soup](#)

“If Biden capitulates to the Republicans, that will also be very bad. They want to raise work quotas for federal aid like SNAP and Medicaid, drop spending raises below the rate of inflation, scrap Biden’s already meager student loan forgiveness, + cut climate legislation.” —[Soup](#)

“People need to be bracing for the economy to get a lot less stable in the next month. If Biden

and McCarthy don't decide to raise the debt ceiling, benefits are fucked, social services are fucked, interest rates are fucked, and everything will get very expensive.” —[Soup](#)

“This debt ceiling stuff is REALLY BAD and I see absolutely no one talking about it. Hello, fellow anarchist, I also hate politics and the president and everything else, but this is SO SO SO BAD!! Please figure out what you're going to do when the government decides to fuck us!!” —[Soup](#)

“biden delivered 85000 new irs agents and 100000 new cops how does that help you and your families” —[Paul Sorrentino](#)

“You stupid motherfuckers found the budget to award Elon Musk \$2.8 billion for his vanity aerospace company, but you can't bring yourselves to not sunset the \$4 per day, per person food allocation to the hungry in this country? What in the actual fuck is wrong with you people?” —[Fred](#)

“There is enough food for everyone on the planet. Pretending like America's budget is busting because starving people are getting too much free food, and not because of America's bloated war budget, is obscene.” —[Steven W. Thrasher, PhD](#)

“Explainer: Democrats and Republicans have a tentative agreement on raising the debt ceiling. One of the provisions of the agreement is that it codifies an end to the pause on student loans—September 1st. This has huge and catastrophic financial implications for 50M+ people. Okay, this point is important:

Codifying the end to the pause doesn't just mean “the date to resume payment is September 1st.”

It means “the date to resume payment is September 1st and there is never a chance of extending this date further again, ever. It will be impossible.”

You may think “well wasn't the pause going to end anyway?”

Not necessarily. The pause has been extended 7 times, often mere days before it's set to expire. This deal takes away that possibility. A nail in the coffin to the end of a pause. So why is that bad?

Several reasons...

The Biden admin was gearing up to resume payments **because** they were going to simultaneously cancel lots of debt—20M accounts zeroed out. Because of COVID's impact, the Biden admin said returning to repayment **needed to be coupled** with relief. Otherwise you'd be ignoring COVID.

(This isn't our words—this is what the Biden admin argued before the Supreme Court back in February) If SCOTUS rules student debt relief is legal, Biden can say he took action on student debt—the second largest household debt in the country.

The problem is, WE DON'T KNOW what SCOTUS will rule. We're still waiting. Basically this debt ceiling deal puts the cart before the horse.

If SCOTUS rules Biden **cannot** implement relief, Biden can try again with a different legal authority—and he should. But what if it takes a few weeks/months to implement? What if he

doesn't try again? Borrowers will have no debt relief but be expected to make costly payments.

And that's the problem. This debt ceiling agreement ties Biden's hands behind his back—unnecessarily. It removes the one backstop that Biden can use to ensure borrowers don't have to resume payment without getting their relief.

What if the Biden admin comes across a new reason to extend the pause before Sept 1? What if they learn that 20% of the people with student loan accounts have incorrect information, leading to illegal debt collection practices? Too bad. The end to the pause was codified. Collect.

What if a new Fed Reserve report shows 80% of borrowers aren't able to make payments—and millions won't be able to afford medication or rent? Sorry. Dems cut a deal with Republicans back in June and didn't read the bill text thoroughly or bother to care.

What if payments begin and millions—literally millions—of people default on their debt. What if Seniors get their Social Security checks garnished in masse. Darn! Dems signed a debt ceiling deal with that pesky provision and didn't bother to put up a fight when it was time to.

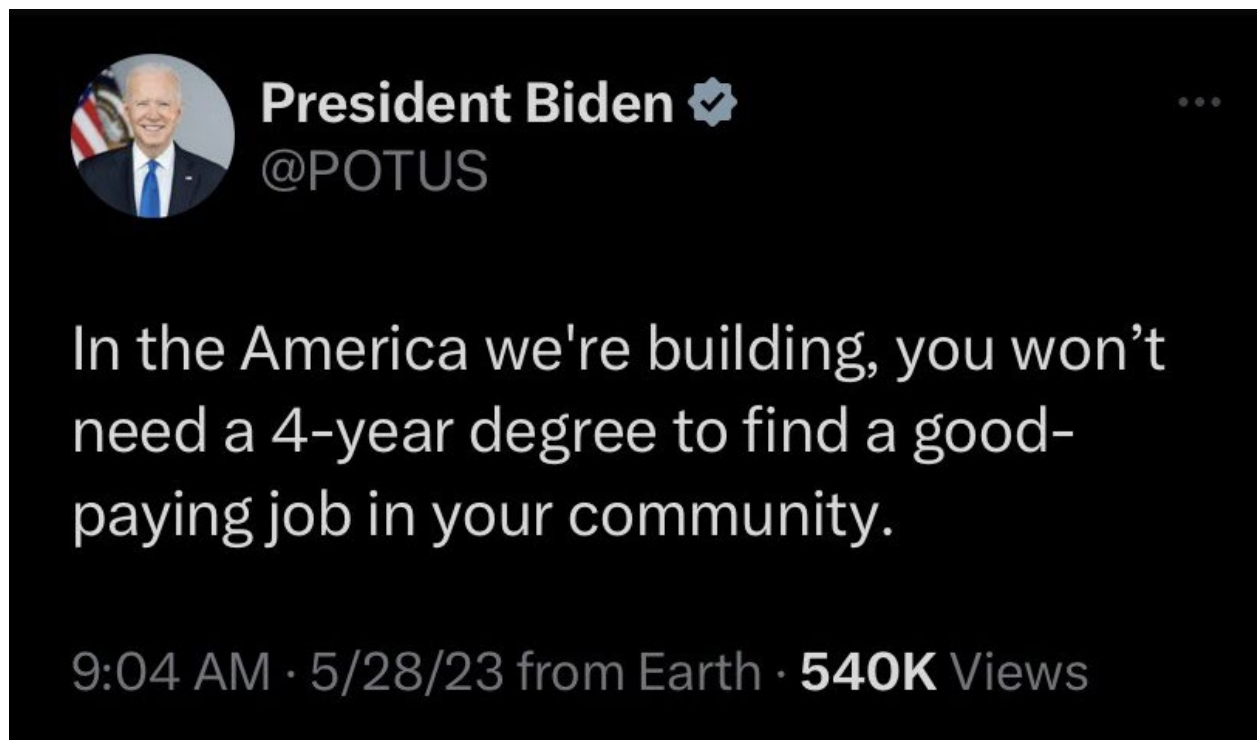
There's many more reasons to extend the pause, and absolutely no reason to let Republicans push Biden in a corner. Biden will try to tell you this is the fault of Republicans and there was nothing he could do.

That won't be true. It is't true. The provision should go.” —[The Debt Collective](#)

“Resuming student debt payments will crush working families and is simply bad policy—but agreeing to codify the pause's end into law before the Supreme Court decides on broad-scale relief is criminal.” —[The Debt Collective](#)

“There is a student loan provision as well: the agreement, as I understand it, codifies into law the administration's existing plan to end forbearance. Theoretically if there's another emergency they could again enact a moratorium.” —[Jeff Stein](#)

“I'm not a political adviser, but... Maybe don't tweet pseudo populist nonsense the day after freezing social spending for two years, I dunno. Seems a bit insulting.” —[The Millenial Snowflake](#)



Americans Go Deeper Into Debt as They Use Buy Now, Pay Later Apps for Groceries —Businessweek

“For many disabled people, work is made impossible by employers refusing to take reasonable actions to allow qualified people to perform a job. I’ve been denied and removed from jobs by both overt and silent discrimination as a result of being 100% blind.” —[Yosh](#)

“You forgot that instead of any military gifting funds being slashed.. they actually added to it. Politicians gotta eat too. Amazing that we have not been attacked on the mainland but Ukraine is close to it. Billions of \$\$ are reallocated into superpac donations ” —[ALO](#)

Food pantries in the U.S. stretched to the limit —Bill Walton, Supermarket News

“We live in a society that loves to hear good stories about people coming together to help members of their community that are in need, but scoff at the idea of building a system based on that very same concept.” —[Aimee into the Sun](#)

“Instead of imposing work requirements on food assistance, why not implement a #JobGuarantee to set a floor for wages and compete with private companies that don’t pay enough for people to live on?” —[Johnny Akzam](#)

“#WageWorkOrDie is not freedom, social justice, or civilized. “Cruelty is the point.” People can’t make businesses hire them, pay them a living wage, offer health insurance benefits, or safe working conditions. Many aren’t physically able to do jobs requiring lifting 50 pounds.” —[Paula Hardin](#)

“Reported items that should anger progressives in the debt limit bill:

- 20 hours work requirement for TANF/SNAP
- Work [age] requirement for SNAP increases from 49 to 54
- End student loan payment pause
- \$886,000,000,000 defense budget" — [Tracking Biden From The Left](#)

Joe Biden Agrees To Stricter Work Requirements For Food Assistance Program —Huffpost

On Monday, 29 May 2023, when a reporter asked what President Joe Biden “some people are saying that this [deal] will lead some people to go hungry, what is your response to that?” Biden’s response was “It is a ridiculous assertion.”

“Forcing people to work in order to earn food stamps means homeless people, disabled people, chronically ill people, abused spouses escaping domestic violence etc. will be ineligible.” — [mermaidlife](#)

“Work requirements for people to have *food* is not a “deal” anyone should support.” — [The Debt Collective](#)

“Make no mistake - Joe Biden is CHOOSING to cut domestic programs and increase work requirements while increasing spending on war because he simply does not give a shit about us.” — [Holding Biden Accountable \(From The Left\)](#)

“Folks, this debt crisis was a phony crisis from the beginning meant to normalize austerity & warmongering. The servants of capital in both parties would not have dared to allow a default. Folks, the people in Congress are not in charge.” — [Ajamu Baraka](#)

“There is no debt ceiling crisis. Biden and McCarthy made it up to scare you into accepting their cuts to your retirement and food to poor people. Stop tolerating it. Only two countries in the world have debt limits. The United States and Denmark have legal limits on how much money their governments can borrow. Joe Biden hasn’t changed his mind on cutting Social Security and Medicare after advocating for cuts for his entire career.” — [Stephanie Voltolin](#)

“Remember months ago when we told you President Biden would cave to the very people he claims are a threat to democracy? He could have used constitutional means to ignore Republicans and do the right thing, but he’s one of them.” — [Johnny Akzam](#)

28 May 2023: “The Democratic president just approved a budget deal that forces people in poverty into more onerous work requirements on SNAP just to be able to eat. Do not vote for democrats - they don’t vote for you.” — [Professor Anthony Zenkus](#)

debt crisis 2023

“Folks, let’s be honest. This debt crisis is a ruling class hustle. It is not the “right-wing” forcing its agenda on the democrats but a drama played out whenever democrats control the executive with the objective to reduce social spending while maintaining military spending.”

—[Ajamu Baraka](#)

On Wednesday, 24 May 2023, Democratic representatives Jared Golden (Maine) and Marie Gluesenkamp Perez (Washington) voted with Republicians to to repeal the student debt relief program and terminate the freeze on federal loan payments and interest. Perez bragged “Teams get shit done, so I’m teaming up with Jared Golden and Mary Peltola to rebuild the Blue Dogs into something useful for working people. We know who we are and we know how to win. Congress needs more people like us, and a lot fewer weirdos with white nationalist friends.” My comment is that ebveryone voting for the “lesser evil” needs to become aware that the Democrats and Republicans are equally evil and work for their billionaire donors. Time to vote Green.

“The Pentagon can’t account for hundreds of thousands of spare parts worth millions that are stored worldwide for the U.S. and allies.

The Pentagon shouldn’t receive ANOTHER CENT of taxpayer money until it can pass an audit.” —[Brave New Films](#)

“I love how the prevailing narrative is that we as a country miraculously “ran out of money.” No. We’re still the richest nation in modern history.

We just gutted the public sector, in order to line the pockets of the ruling elite.

Framing matters. Words matter.” —[The Millennial Snowflake](#)

debt limit 2023

Speaker of the Housew Kevin McCarthy, R-Calif, announced a plan to cut domestic programs, including Social Security and Medicare, in trade for an approval to raise the national debt limit by \$1.5 trillion. He named this the “Limit, Save, Grow Act.”

McCarthy’s plan would also impose newwork requirements to receive Medicaid and SNAP (food stamps), end the additional IRS funding from President Joe Biden’s Inflation Reduction Act, repeal green energy tax credits, rescind funding for the Covid-19 pandemic, expedite new oil drilling projects, and cut non-military budgets back to 2022 levels.

“US Treasury Secretary Yellen: Biden has offered changes that will result in \$1 trillion in deficit reduction.” —[@unusual_whales](#)

debug-contents

keyword: COBOL reserved word (z/OS)

debugger

keyword: JavaScript reserved word

debug-item

keyword: COBOL reserved word (z/OS)

debug-line

keyword: COBOL reserved word (z/OS)

debug-name

keyword: COBOL reserved word (z/OS)

debug-sub-1

keyword: COBOL reserved word (z/OS)

debug-sub-2

keyword: COBOL reserved word (z/OS)

debug-sub-3

keyword: COBOL reserved word (z/OS)

debugging

keyword: COBOL reserved word (z/OS)

debunk

“Effective Debunking:

- 1) Provide the science (yes, that works!)
- 2) Use clear & shareable content
- 3) Ref trustworthy & independent sources
- 4) If possible, note scientific consensus (and that science evolves!)
- 5) Be nice, authentic, empathetic & humble
- 6) Consider a narrative (creativity wins!)
- 7) Highlight gaps in logic & rhetorical tricks
- 8) Make facts the hook (not misinformation)
- 9) Remember the general public is the audience (not the hardcore denier!)” —Timothy

Caulfield

dec

keyword: SQL reserved word (z/OS)

See: DEC — PL/I attribute

See: DEC — PL/I function

decimal

keyword: SQL reserved word (ANSI, Oracle, z/OS)

DECIMAL

keyword: PL/I keyword

Abbreviated: DEC

Attribute

DECIMAL(a[,p[,q]])

keyword: PL/I keyword

Abbreviated: DEC

Built-in function

decimal-point

keyword: COBOL reserved word (z/OS)

declaratives

keyword: COBOL reserved word (z/OS)

declare

keyword: Ada reserved key word

keyword: PHP reserved word

keyword: SQL reserved word (z/OS)

DECLARE

keyword: PL/I keyword

Abbreviated: DCL

Statement

DEC MICA

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

for the DEC PRISM — [Wikipedia: List of operating systems](#)

decodeURI

keyword: JavaScript windows method

decodeURIComponent

keyword: JavaScript windows method

DeepPink

keyword: HTML color name

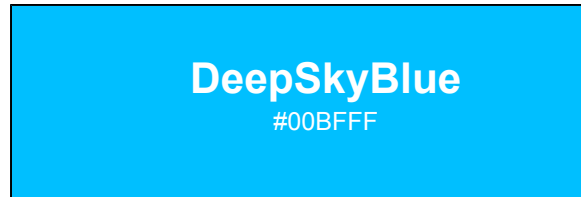
DeepPink

#FF1493



DeepSkyBlue

keyword: HTML color name



def

keyword: Ruby reserved word

See: DEF — PL/I

default

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

DEFAULT

keyword: PL/I keyword

Abbreviated: DFT

Statement

defaultStatus

keyword: JavaScript windows method

default crisis

“You can say #RepublicanDefaultCrisis all you want, but the reality is Biden has constitutional options that he’s too weak to implement.

“He’s a weak and spineless leader that has broken nearly every campaign promise he made in disastrous fashion.” —[Johnny Akzam](#)

DEFINED

keyword: PL/I keyword

Abbreviated: DEF

Attribute

defined?

keyword: Ruby reserved word

deforestation

7 August 2023: “It’s really not that difficult now to imagine a world without forests. Amazon is regressing to savanna. Taiga is sinking into melting permafrost. All other forest is either desertifying or burning. EVERYTHING can collapse very quickly from here. #ecology #ClimateCrisis

Oxygen down, CO₂ up, boom. Another planet. 8 billion decomposing humans also means a

lot of methane, ammonia and hydrogen sulfide which are primordial ingredients of life. So back to square one” —[George Tsakraklides](#)

7 August 2023: “At current rates of deforestation, Earth will be without forests in about 30 years. That’s nothing to do with climate change btw. So don’t tell me we need electrification, tell me how we are going to stop this culture from making the planet uninhabitable.” —[Justin McAfee](#)

delay

keyword: Ada reserved key word

DELAY (n)

keyword: PL/I keyword

Statement

delete

keyword: COBOL reserved word (z/OS)

keyword: JavaScript reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

DELETE

keyword: PL/I keyword

Statement

delimited

keyword: COBOL reserved word (z/OS)

delimiter

keyword: COBOL reserved word (z/OS)

delta

keyword: Ada reserved key word

democracy

“DEMOCRACY — Government by the people, i.e. the established body of citizens, whether through direct role or through elwected representatives.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

Democratic Party

28 July 2023: “Democrats are running on “orange man bad” again. It’s going to backfire because Biden has been worse.” —[Stephanie Voltolin](#)

Democrats will always choose to side with fascists over socialists because fascism doesn’t threaten capital. [saying]

2 June 2023: “Democrats take control of the government and boom. The next thing you know, you lost Roe v. Wade and young children are working in mines and slaughterhouses again. Keep “saving democracy.” You guys are doing great.” —[TweetyMctwat](#)

29 August 2023: “Democrats are not committed to democracy internally in how they run their primaries or externally in how they deal with third parties. They are not committed to democracy at home in how they hide the oligarchy or abroad with their imperialism.” —Cornel West

29 August 2023: “Nader was cool & didn’t cost the election. Gore winning wouldn’t mean after 9/11 that we didnt start war on terror, which was also pushed by an evil democrat named Biden. Clinton bombed Iraq, too. There’s no LESSER evil, just evil. No ty!” —[Revolutionary](#)

[Blackout Network](#)

Denali

3 January 2024: “Alaska became the 49th US state on 3 January 1959. It is the largest state in the union, being two and a half times the size of Texas. Alaska is home to North America’s highest peak, Denali, seen in the background in this picture. Denali, at the heart of the six-million-acre Denali National Park and Preserve, stands 6,190 m (20,310 ft) above sea level and is the third-highest of the Seven Summits (the tallest peaks on all seven continents). Denali has five large glaciers flowing off its slopes. The mountain’s name comes from Koyukon, a Native Alaskan language, and means “the high one” or “the tall one.” ” —CIA World Factbook (material that expires after 30 days)



Deos

operating system

Proprietary OS by DDC-I, Inc.

Time & Space Partitioned RTOS, Certified to DO-178B, Level A since 1998. —[Wikipedia: List of operating systems](#)

depending

keyword: COBOL reserved word (z/OS)

DEPTH

keyword: PL/C keyword

Diagnostic option of PUT statement as in `OUT SNAP DEPTH (4) ;`

depleted-uranium tank rounds

14 July 2023: “Wake Up People The DNC/RNC Corporate Duopoly Are One...

U.S. Set to Approve Depleted-Uranium Tank Rounds for Ukraine

The armor-piercing ammunition has raised concerns over health and environmental effects”

— [Dark Warlord](#)

19 August 2023: “If you believe voting blue for harm reduction is gonna somehow work better than it has the last 3 decades of trying that strategy, that’s your right.

But don’t lecture people who’ve been burned by that strategy for demanding better.”

— [America’s Exceptionalist Dumpsterfire](#)

Ron DeSantis

20 October 2022 [[C-SPAN Florida Gubernatorial Debate](#)]: “You have people that are teaching — and actually his running mate has said this in the past — that teaching the United States was built on stolen land. That is inappropriate for our schools; it’s not true.” —Ron DeSantis

“As a general statement, yes, the United States stole land from Native Americans.” —Philip Deloria, Native American history professor at Harvard University

desc

(ANSI, Oracle, z/OS)

keyword: SQL reserved word

descending

keyword: COBOL reserved word (z/OS)

DESCRIPTION

keyword: PL/I keyword

Option of DEFAULT statement

desk

the earliest evidence of the existence of desks is from 14th century (1300s) Medieval illustrations showing table-like surfaces for reading and writing that featured a flat tilted surface held up by long wooden legs.

destination

keyword: COBOL reserved word (z/OS)

detail

keyword: COBOL reserved word (z/OS)

See: DFT — PL/I

DG/UX

abbreviation

operating system

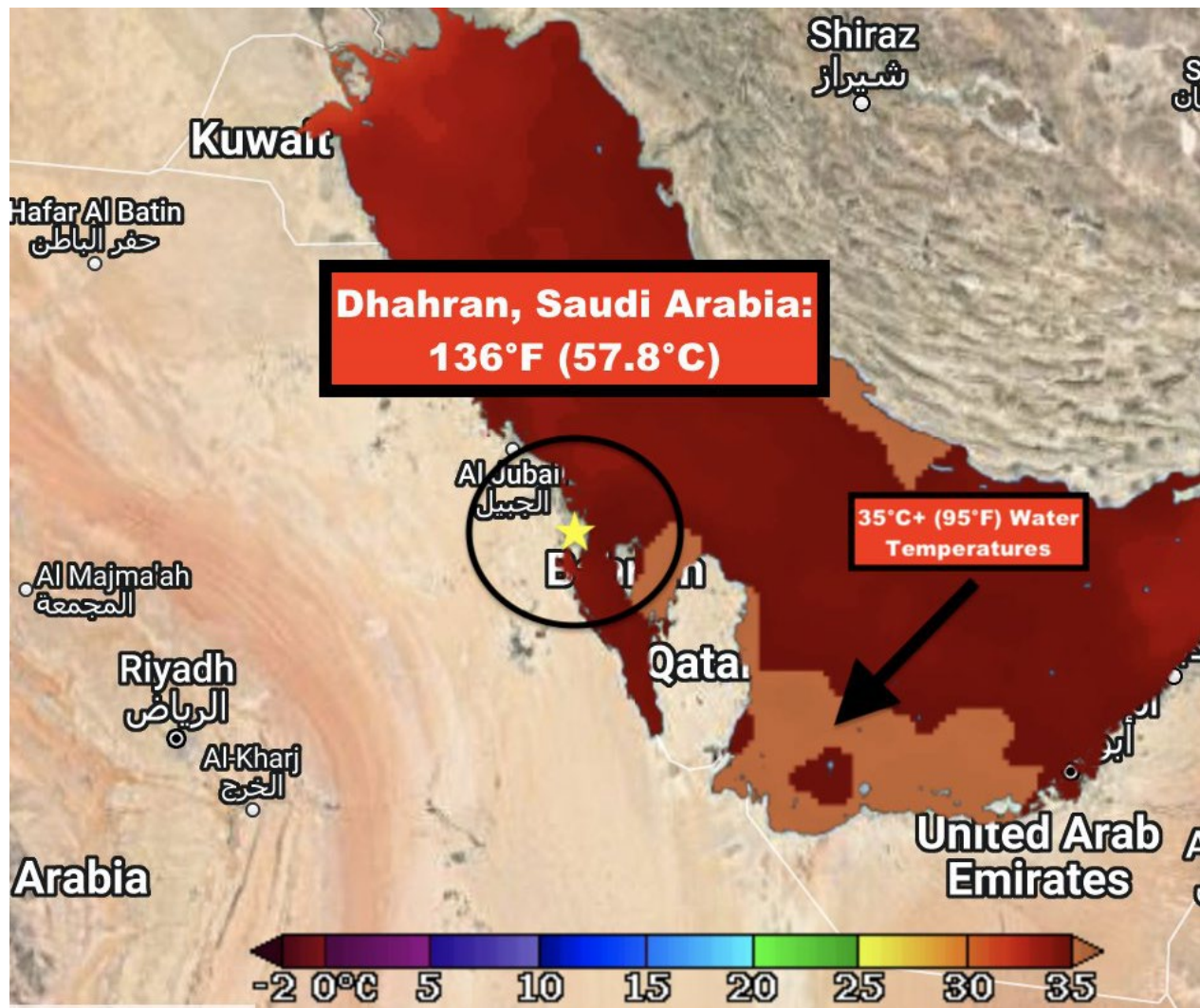
Proprietary OS by Data General.

Dhahran, Saudi Arabia

5 August 2023: “Dhahran, Saudi Arabia, just recorded a heat index of 136°F (57.8°C) at midnight.

A heat index that high is near the limits of human survival.

The highest heat index ever recorded on Earth of 178°F (81°C) actually occurred in Dhahran on July 8, 2003.” —[Colin McCarthy](#)



diabetes

Some of the causes of diabetes include: deficiency of chromium.

Diabetes is one of the conditions reported by the state of California as grounds for insurance companies to charge unreasonably high premiums or to outright reject providing health insurance, according to a front page article by Lisa Girion in the December 31, 2006, *Los Angeles Times*.

Cinnamon helps lower plasma glucose levels in patients with poorly controlled type 2 diabetes, according to research at the Beltsville Human Nutrition Research Center in Maryland. One-half to three teaspoons of cinnamon a day improves blood glucose, triglycerides, and fats after just 40 days.

Garlic may help prevent type 2 diabetes.

Recent research shows that sage can be useful as a treatment for type 2 diabetes.

diamond pattern tie

Hishi Karada (Diamond Pattern Tie): This is a decorative body harness that results in a diamond-shaped pattern across the body.

See also: shibari

Charles Dickens


10 December 2023: “every year someone gets bothered because I point out that It’s a Wonderful Life and A Christmas Carol warn of the dangers of predatory capitalism. what did you think these stories were saying” —[Owl! at the Library](#)

17 December 2023: “Time for your annual reminder that, according to A Christmas Carol, Bob Cratchit makes 15 shillings a week. Adjusted for inflation, that’s \$530.27/wk, \$27,574/yr, or \$13.50/hr.

Most Americans on minimum wage earn less than a Dickensian allegory for destitution.” —[Chris Thompson](#)

dictatorship

“DICTATORSHIP — Government whose final authority rests in the hands of one supreme head.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

See: `.dib`  — file extension

Denis Diderot

“Men will never be free until the last king is strangled with the entrails of the last priest.” — Denis Diderot

die()

keyword: PHP reserved word (this is a reserved word and not a function)

digital audio workstation (DAW)

19 October 2023: “daw cheat sheet” — [Solar Heavy](#)



Digital UNIX

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

derived from OSF/1, became HP's Tru64 UNIX — [Wikipedia: List of operating systems](#)

digits

keyword: Ada reserved key word

Dignity

17 March 2023: “I don’t know why this hasn’t received more publicity, but this fifty-foot sculpture was unveiled recently in South Dakota.

It’s called ‘Dignity’ and was done by artist Dale Lamphere to honor the women of the Sioux Nation.” —[Osamuskwasis Roan](#)



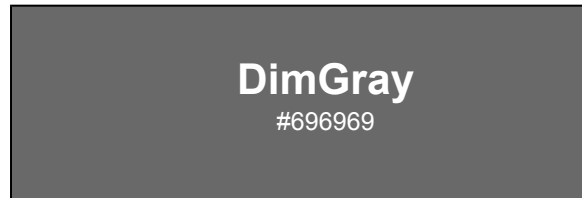
DIM(x, n)

keyword: PL/I keyword

Built-in function

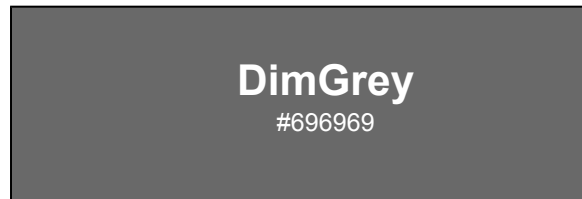
DimGray

keyword: HTML color name



DimGrey

keyword: HTML color name



Jamie Dimon

23 July 2023: “We have to ignore the climate crisis so that Jamie Dimon can still fly to Davos by private jet in order to attend panels on the climate crisis.” —[Jamie Dimon](#)

Jamie Dimon is an American billionaire banker, chairman and chief executive officer of JPMorgan Chase since 2005.

See: `_DIR_` — PHP

DIRECT

keyword: PL/I keyword

Attribute

directive_error

keyword: SQL reserved word (z/OS)

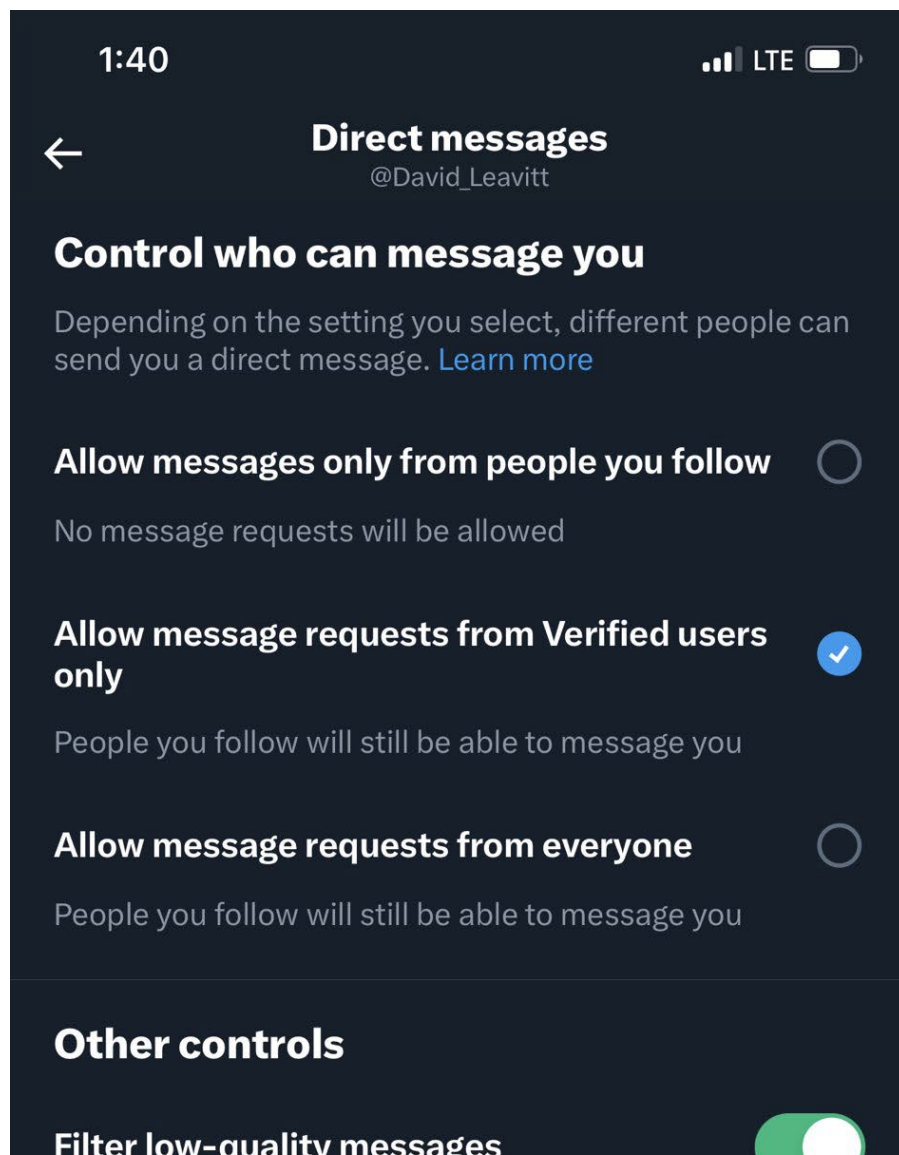
Direct Messages

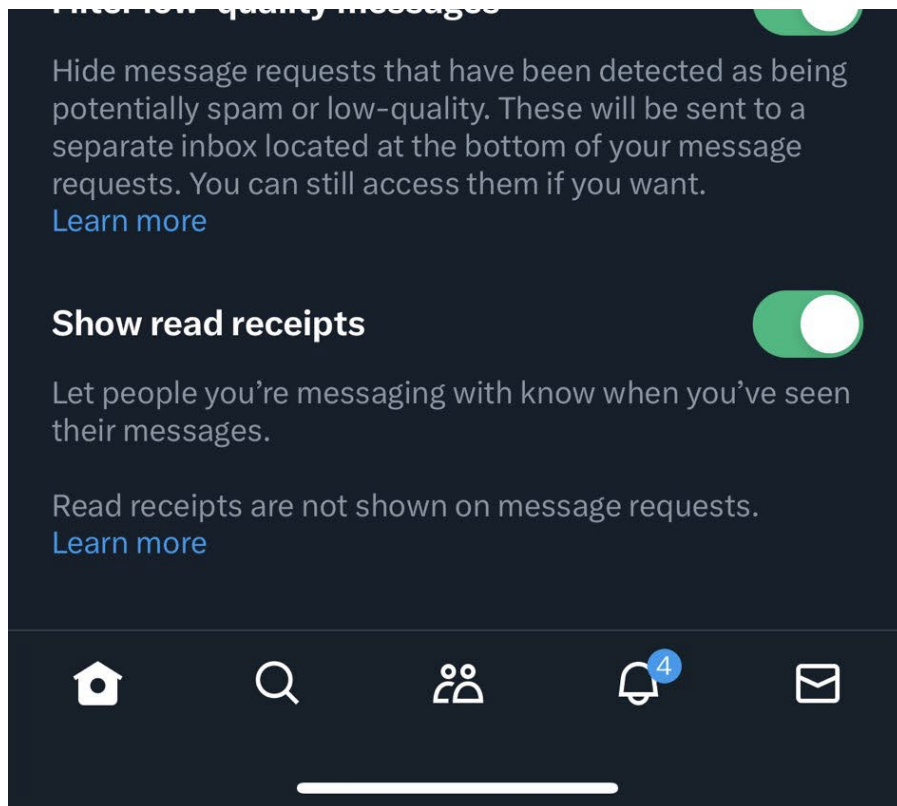
15 July 2023: “Overnight Twitter changed everyone’s Direct Messages to “allow message requests from Verified users only’

They did this without your consent

If you haven’t received messages from your friends today that’s why

You need to go into settings and change it back” —[David Leavitt](#)





dirk

noun “See dagger (Penal Code Section 16470)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

See: dagger

disabled

Skeleton of Disabled Teen With Bracelet Puzzles Archaeologists

BY **ROBYN WHITE** ON 7/18/23 AT 12:13 PM EDT

18 July 2023: “They’re literally puzzled because she had spine problems and couldn’t walk but still managed to be in normal community? They’re puzzled because she had jewelry as a disabled person? I’m sure local natives could’ve told them disabled people had normal lives- but they NEVER LISTEN.

And they act like natives are uncivilized but they’re OH SO PUZZLED by the idea of disabled people receiving care from community? Human beings evolved to work together, this new way of living isn’t natural or ethical. THAT’S puzzling.

(Pre contact Brazil)

They really just dig people up for fun and ponder over it instead of just asking the people directly or admitting that their own society is a failed one.

What a miserable thing to be puzzled about. What miserable lives these people must lead if they’re shocked by disabled people getting treated humanely.” —[*yeti*](#)

disconnect

keyword: VHDL reserved key word

Disney

8 August 2023: “Disney has created a task force to study A.I. and see how it can be integrated to cut costs” —[Culture Crave](#)

display

keyword: COBOL reserved word (z/OS)

DISPLAY

keyword: PL/I keyword

Statement

display-1

keyword: COBOL reserved word (z/OS)

Benjamin Disraeli

“Justice is truth in action.” —Benjamin Disraeli

distinct

keyword: SQL reserved word (ANSI, Oracle, z/OS)

divide

keyword: COBOL reserved word (z/OS)


DIVIDE(x, y, p[,q])

keyword: PL/I keyword

Built-in function

division

keyword: COBOL reserved word (z/OS)

See: [.djvu](#)  — file extension

See: [.dm](#) — file extension

See: [.dng](#) — file extension

do

keyword: Ada reserved key word

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: PL/I keyword

Statement

keyword: Ruby reserved word

keyword: SQL reserved word (z/OS)

Doctor Medical play set

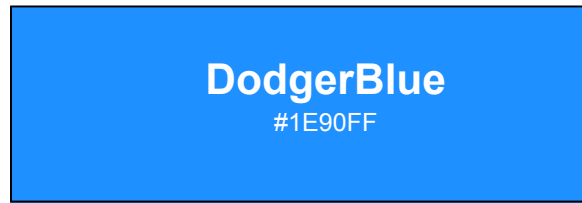
“Why is there a gun? ” — [David Leavitt](#)



edition 0.179

DodgerBlue

keyword: HTML color name



my dogs are barking

The phrase “my dogs are barking” was created by journalist T. Dorgan of the *New York Evening Journal* to mean “my feet hurt”.

dollar

“Just because it has been that way as long as you can remember does not mean it has always been that way or needs to continue being that way” —[Baeson](#)



DOM

keyword: JavaScript windows object

DOMA

Joe Biden voted in favor of the Defense of Marriage Act (DOMA), banning gay marriage in the U.S.

Domain/OS

operating system

Proprietary operating system by Apollo Computer.

One of the first network-based systems. Ran on Apollo/Domain hardware. Later bought by Hewlett-Packard. — [Wikipedia: List of operating systems](#)

domestic violence

In a 9 March 2023 speech on his fiscal year 2024 budget proposal's massive increase in funding for the police, Joe Biden claimed “We expect our cops to be social workers, We expect themn to be psychologists, mental health counselors. More cops are killed responding to domestic violence calls than anything else. Did you know that?”

FBI data for 2012 to 2021 shows 504 police officers shot to death. 19 were related to domestic violence. Other reasons accounted for far more officer deaths, including traffic violation stops, wanted fugitives, and suspicious people/circumstances.

FBI data for 2022 shows 60 police officers killed feloniously, almost all were shot. 12 were ambushed, 11 related to investigative/enforcement work, 6 for disorder/disturbance (domestic disturbance, civil disorder, etc.), 6 were a tactical situation, and 6 were unprovoked attacks. Another 58 were killed accodents (mostly car crashes) and 81 from medical conditions (52 from COVID-19).

Joe Biden lies as much as Donald Trump does. Vote Green.

Dominican Republic

nation

Invaded by the United States 1965

See: Dom Perignon Statue

Doomsday Clock

On 24 January 2023 the *Bulletin of the Atomic Scientists* set their famous Doomsday Clock to 90 seconds to midnight, the closest it has ever been since its inception in 1947.

Doritos light

Doritos light are banned in Canada and the European Union because they contain Olestra, which is linked ot loose stools and abdominal cramping.

DOS

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

A family of operating systems.

DOS

abbreviation

operating system

Proprietary OS by Datapoint.

Disk Operating System for the Datapoint 2200, 5500, and 1100. — [Wikipedia: List of operating systems](#)

DOS PPlus 1.1-2.1

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a single-user, multi-tasking system derived from Concurrent DOS 4.1 - 5.0 — [Wikipedia: List of operating systems](#)

DOS**See: dosha**

Fyodor Dostoevsky

“People speak sometimes about the “bestial” cruelty of man, but that is terribly unjust and offensive to beasts, no animal could ever be so cruel as a man, so artfully, so artistically cruel.”
—Fyodor Dostoevsky

double

keyword: C keyword: data type

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: SQL reserved word (z/OS)

double-column ties

Single- and Double-Column Ties: These are foundational ties that bind a limb (or multiple limbs) to an object or to another limb. They’re called “column” ties because they wrap around cylindrical shapes, like wrists or ankles.

See also: shibari

doublegreatethan

keyword: SQL reserved word (z/OS)

Frederick Douglass

“If there is no struggle, there is no progress.” —Frederick Douglass

down

keyword: COBOL reserved word (z/OS)

downto

keyword: VHDL reserved key word

draft dodgers

Joe Biden, who had been a lifeguard and a football player during college, got five draft deferments for asthma during the Vietnam War.

drag shows



DR-DOS 3.31-6.0

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a single-user, single-tasking native DOS derived from Concurrent DOS 6.0 — [Wikipedia: List of operating systems](#)

DOS

salad dressing

Most store-bought salad dressing is high in calories and inflammatory industrial oils.

You can quickly make healthier homemade salad dressing by half and half olive oil (or hemp seed oil) and vinegar with spices you select.

dressmaker

The 19th century phrase “piss like a dressmaker” meant to urinate urgently. At the time, dressmakers were not allowed to leave their work benches and had to urinate in place while they worked.

drop

keyword: SQL reserved word (ANSI, Oracle)

drug war

18 March 2023: “Overdoses Continue To Fuel Sales For The SACKLERS — The Family Accused Of Igniting The Opioid Crisis

The Owners Of OxyContin Maker Purdue Pharma Have An Overseas Venture” — [Mighty Mouse](#)

drum

Q: What’s the similarity between a drummer and a philosopher?

A: They both perceive time as an abstract concept.

Q: How can you tell the drummer is at your door?

A: The knocking speeds up.

Q: How late does the band play?

A: About half a beat behind the drummer.

Q: What did the drummer say to the band leader?

A: Do you want me to play too slow or too fast?

Q: How does the drummer address his daughters?

A: Anna one, Anna two.

11 December 2023: “Kick mixing tip

If you hear that kick starts to drown at some point in the mix, or it sounds different and dull in the mix comparing to kick in solo

It is a sign of the conflict. Something is not allowing kick to cut through.

Try to turn off different elements to understand when this problem disappears

When you identify which sound doesn't allow kick to cut through, try to fix it, using either:

- Equalization (cut those frequencies that are important for kick, from the other instrument)
- Multiband compression, similar but in dynamic mode, sidechained from kick
- Spectral compression, same as mb compression but more precise (soothe2). Sidechain from kick as well.” — [Nathaniel W](#)

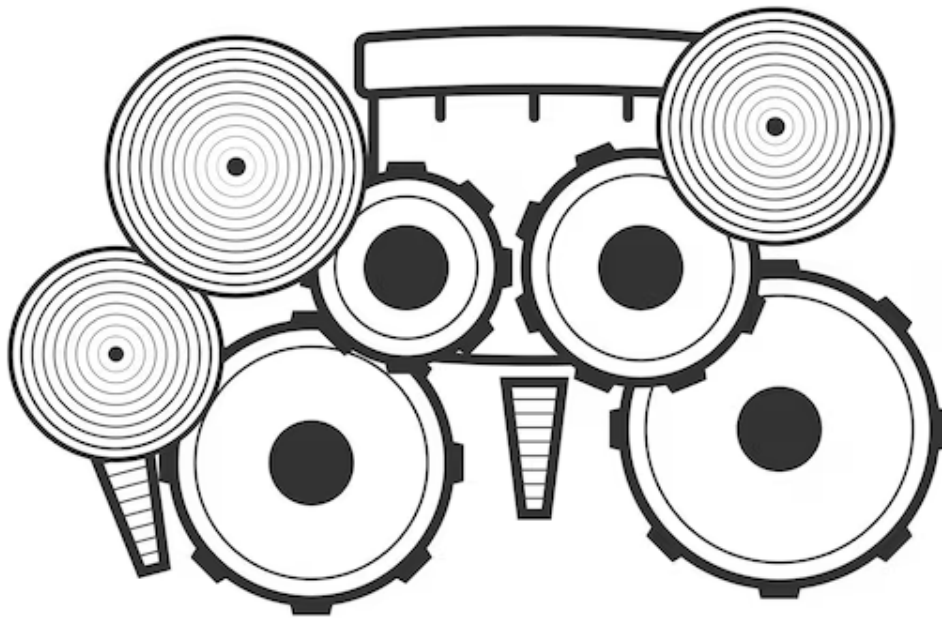
drum panning

5 October 2023: “drum panning cheat sheet” — [Solar Heavy](#)



5 October 2023: “Auto pan/delay + transient shaper on the cymbals x perc group = Grammy”
 —[The Original Protagonist](#)

5 October 2023: “snare off to the left or right slightly too if your going for 1st person (drummer) or 3rd person mix (audience)” —[Jeramiah Ross](#)



Drum SCOPE

operating system


Proprietary OS by Control Data Corporation.

Ran on the Upper 3000 series. — [Wikipedia: List of operating systems](#)

SCOPE

Drumstick ice cream

Nestle's Drumstick ice cream is banned in the European Union because it contains carrageenan, whihc is linked to inflammation and cancer.

See: `.drw`  — file extension

duopoly

4 June 2023: “Dems didn’t...

Cancel student loan debt

Pardon people in fed prison for weed

Expand the court

End 1/2 of child poverty

Give private option health care/m4a

Take climate action

Codify Roe vWade

End filibuster

But now that it’s election season, it will definitely all happen next time.” —[Thia Ballerina](#)

3 July 2023: “Our corporations are not that concerned whether you vote for their Democrats or Republicans, or don’t vote at all. They rely on promises you like to hear, before and after elections to verify you are their submissive and obedient cult followers.” —[dominick1944](#)

17 August 2023: “Democrats for the last 50 years:

“Meaningful change can wait til next time. We just need to beat the Republicans in this election.”

It’s time to wake up & see that Democrats are playing you for fools.

They serve the same corrupt system as Republicans & will never fight for us.” —[Ryan Knight](#)

18 August 2023: “Both parties have completely sold out the public and formed a corrupt merger between corporations and the state, yet liberals are under the illusion that voting for the blue corporate party will save us from the red corporate party when they both serve the same moneyed interests.” —[Ryan Knight](#)

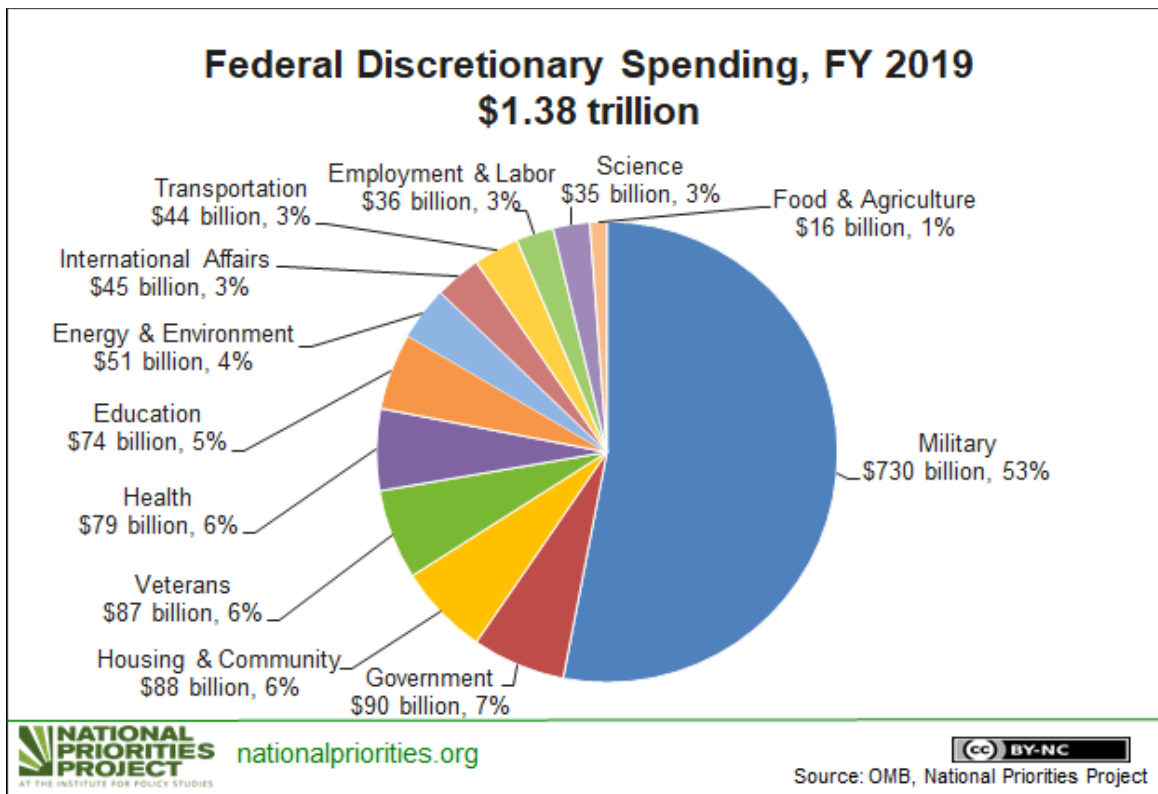
25 August 2023: “Republicans, including Trump, have no agenda to help working people. And Democrats, especially Biden, run on a moderate working-class agenda but end up supporting the Republican agenda.

They are both the hired hands of the power elite, employed to create and protect that wealth.” —[Johnny Akzam](#)

duopoly

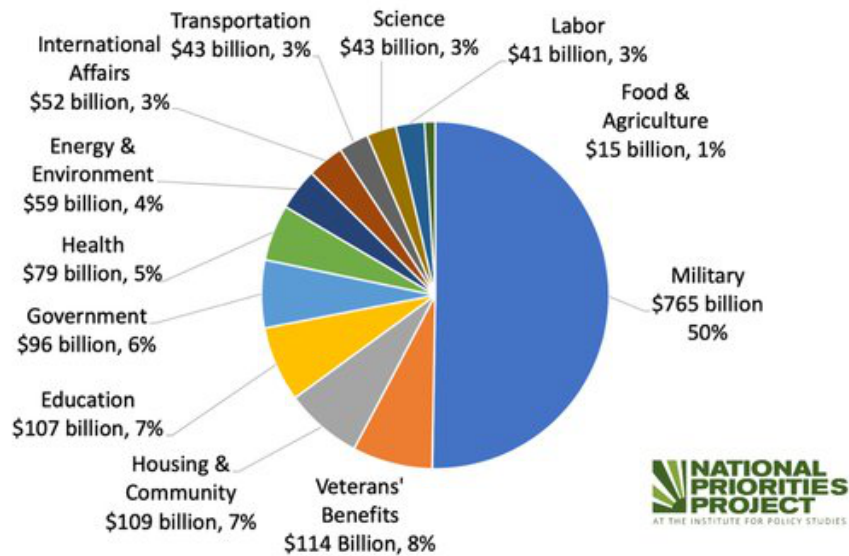
19 March 2023: “In 2019, Trump allocated \$79 billion to health and \$ 730 billion to military. In 2022, Biden allocated \$79 billion to health and \$ 765 billion to military.

It’s weird watching their sycophants act like they’re any different.” —[Stephanie Voltolin](#)

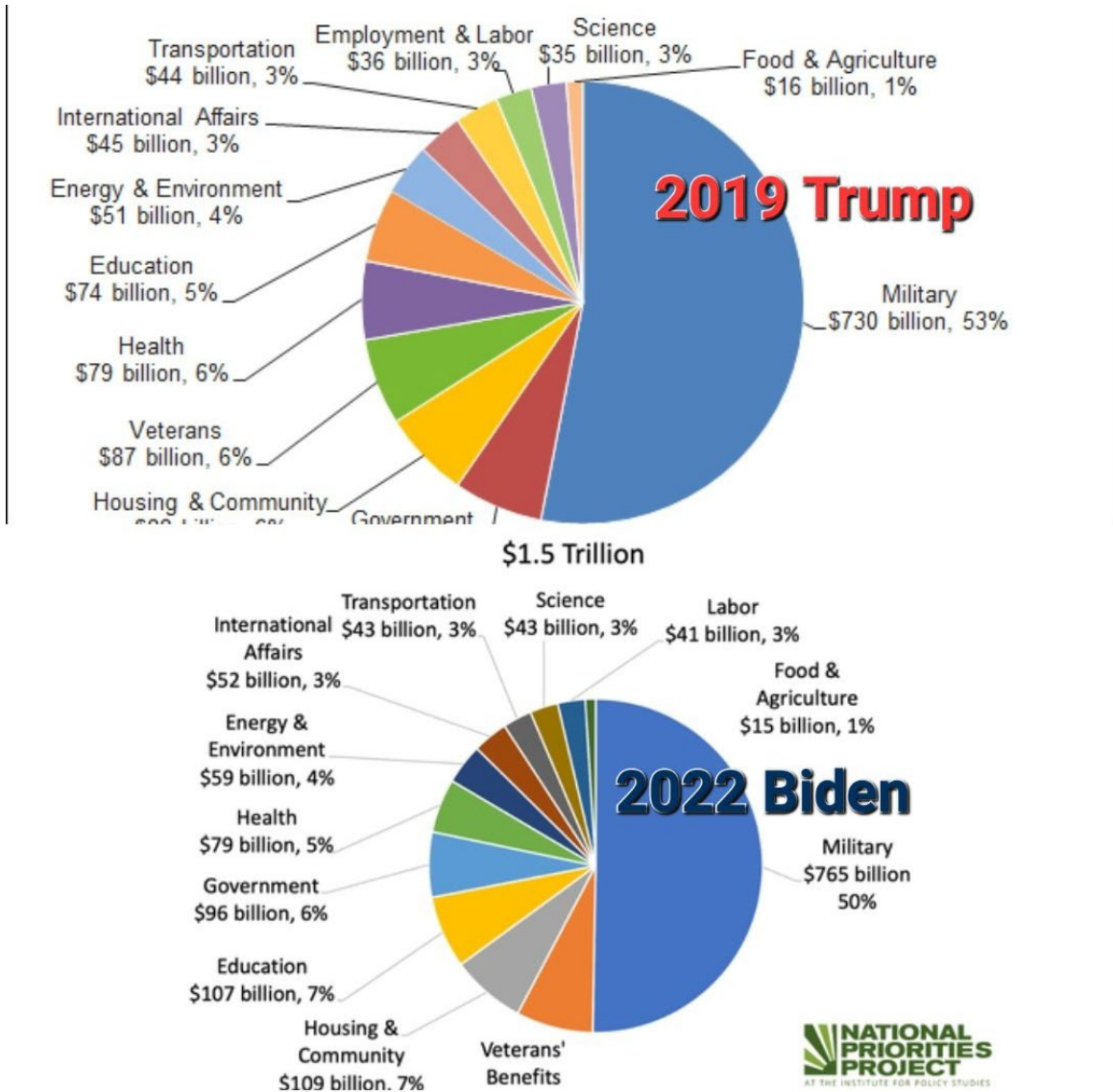


President's Proposed Discretionary Budget FY 2022

\$1.5 Trillion




19 March 2023: “They’re essentially the same.
Military Industrial Complex over People...” —[Stephanie Voltolin](#)



duplicates

keyword: COBOL reserved word (z/OS)

See: .dvr  — file extension

See: .dvf — file extension

dynamic

keyword: COBOL reserved word (z/OS)

See: `@dynamic` — Objective C

Seven Dwarves

The traditional story is based on the life of Margarete von Waldeck, a German countess born in 1533.

The famous version is from Brothers Grimm 1812.

The seven were featured in a 1912 Broadway show called “The Seven Dwarfs”.

Walt Disney gave them names in 1937.

E e

E

ASCII: 45 hex

UNICODE: LATIN CAPITAL LETTER E

e

ASCII: 65 hex

UNICODE: LATIN SMALL LETTER E

E (w, d[s])

keyword: PL/I keyword

Format item

Eagle Chief (Letakos-Lesa)

“In the beginning of all things, wisdom and knowledge were with the animals, for Tirawa, the One Above, did not speak directly to man. He sent certain animals to tell men that he showed himself through the beast, and that from them, and from the stars and the sun and moon should man learn... all things tell of Tirawa.

All things in the world are two. In our minds we are two, good and evil. With our eyes we see two things, things that are fair and things that are ugly... We have the right hand that strikes and makes for evil, and we have the left hand full of kindness, near the heart. One foot may lead us to an evil way, the other foot may lead us to a good. So are all things two, all two.” —[Native Red](#)

CloudMaḥpíya Lúta~Hińhan Wakangli

earth (element)

Earth is one of the four Western elements (fire, earth, air, water).

East Palestine, Ohio, train derailment

18 March 2023: “Norfolk Southern and the Biden admin decided to have a massive chemical bonfire and poison a village. So guess who the media’s blaming?” —[Wyatt Reed](#); The AP News headline states “Pro-Moscow voices tried to steer Ohio train disaster debate”

March Madness Actor Lance Reddick dies France protests

Pro-Moscow voices tried to steer Ohio train disaster debate

By DAVID KLEPPER yesterday



19 March 2023: “Bombshell: First test results for dioxins at the site of Norfolk’s Ohio train disaster show the deadly chemical at levels 14x higher than what other states consider legal. The EPA refuses to test for these carcinogens — yet claims the area is safe.” —[Steven Donziger](#)

19 March 2023: “Get this: They found dioxin far above safe levels in East Palestine water and the federal gov won’t clean it up because Obama killed EPA proposal requiring the gov to lower the threshold for cleanup.

Democrats ignored the science and people will die because of it.” —[Professor Anthony Zenkus](#)

21 March 2023: “ “...Sulphur Run, a creek near the derailment site, has been contaminated and dammed.”

The headline insists “Long-Term Effects Remain Unclear, Experts Say” but the short-term effects, the article acknowledges, are filthy. Who wrote this junk headline?” — [Blair Schirmer](#)

27 November 2023: “The worst environmental disaster in the US since... probably ever, and nine months later it’s just been totally forgotten. Incredible.” — [RAW EGG NATIONALIST](#)

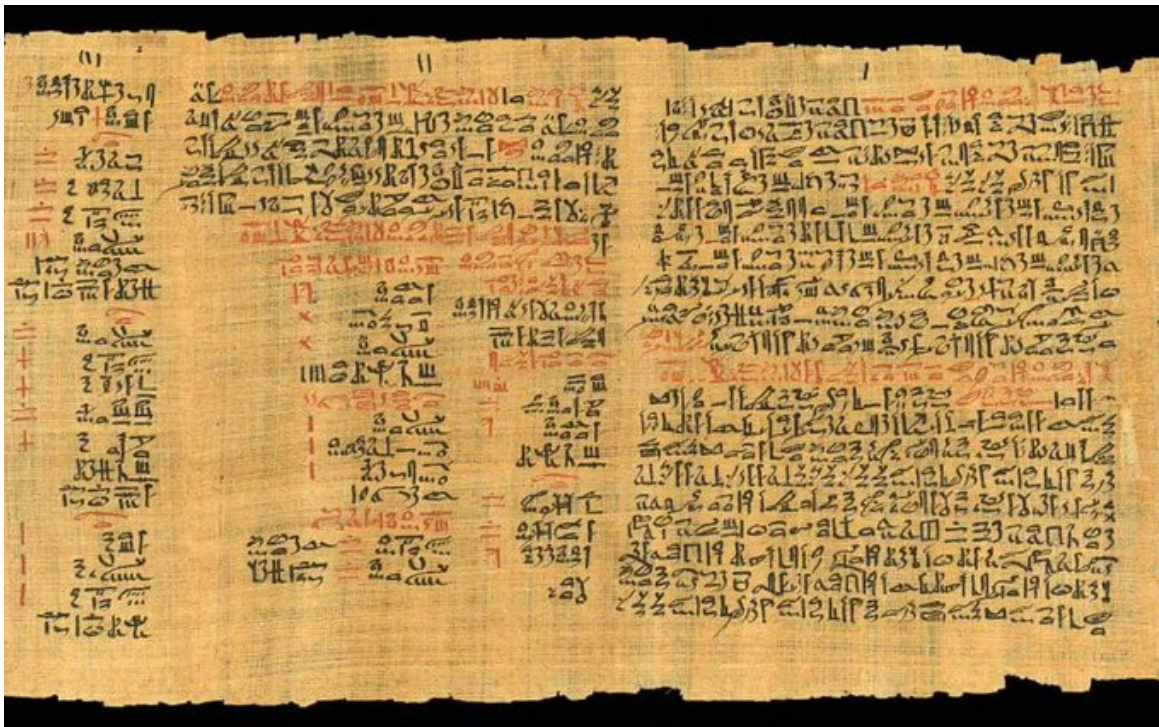


My comment: That photograph should still be haunting everyone rather than long forgotten in the past.

Ebers Papyrus

“The Ebers Papyrus states that ancient Egyptians used yeast of sweet beer to treat infected wounds, along with moldy bread.

No one knew why: it was just 5,000 years later, in 1928, that the discovery of penicillin explained the occasional successes obtained.” — [Massimo](#)



“Absolutely, the Ebers Papyrus, an ancient Egyptian medical document dating back to around 1550 BCE, contains various remedies and prescriptions, including the use of yeast from sweet beer and moldy bread to treat infected wounds. While the ancient Egyptians did not understand the scientific reasons behind their occasional successes, it was only in 1928, with the discovery of penicillin by Alexander Fleming, that the world gained a profound understanding of the antibiotic properties of mold and revolutionized the field of medicine.” —[Brings HFT](#)

“The Ebers Papyrus is one of the oldest and most significant medical texts from ancient Egypt. It dates back to around 1550 BCE and contains valuable information about various medical treatments, diseases, and herbal remedies used in ancient Egyptian medicine. This papyrus scroll offers insights into the medical knowledge and practices of the time, making it a vital historical document for understanding ancient Egyptian healthcare.” —[Sincerely Africa](#)

ebi shibari

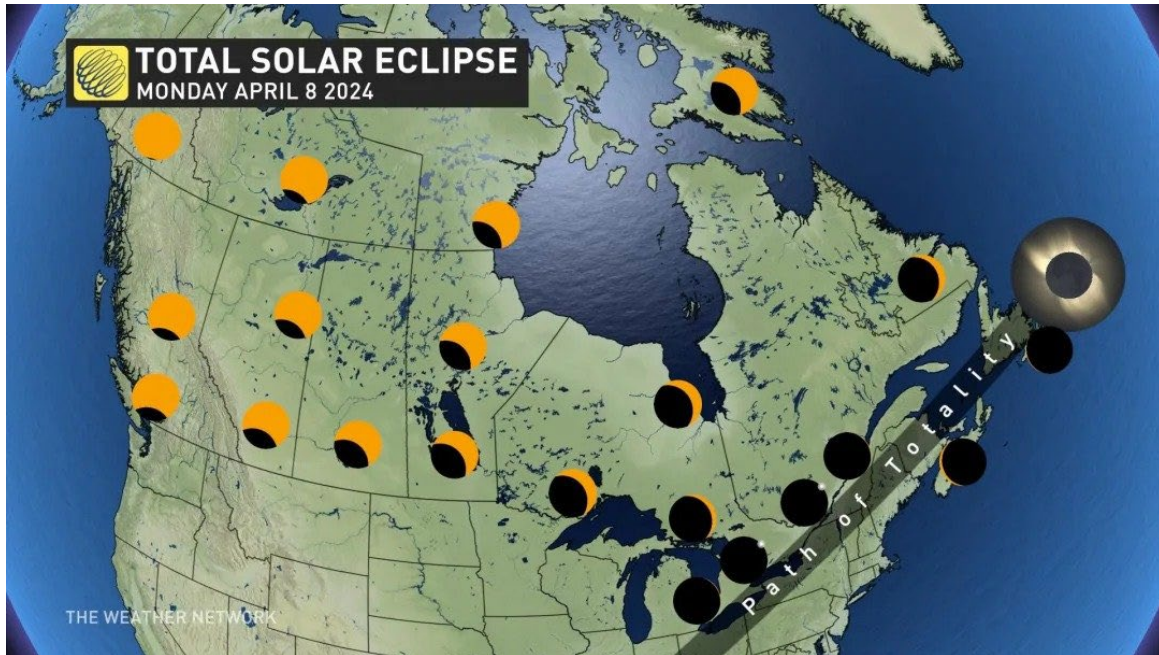
Ebi Shibari (Shrimp Tie): This bends the person forward, causing a posture reminiscent of a shrimp.

See also: shibari

echo

keyword: PHP reserved word

eclipse



economy

Rankings of top 10 largest economies in the world, according to World Bank statistics (Gross domestic product 2022, PPP) -- in millions of international dollars:

1. China 30,327,320
2. United States 25,462,700
3. India 11,874,583
4. Japan 5,702,287
5. Russian Federation 5,326,855
6. Germany 5,309,606
7. Indonesia 4,036,901
8. Brazil 3,769,261
9. France 3,769,924
10. United Kingdom 3,656,809

EDIT

keyword: PL/I keyword

Stream I/O transmission mode

edit (sound)

14 January 2024: “Pro tip: Editing out every bit of extra noise isn’t as significant as you think. Solid performance, solid tone, and solid recording-acoustics is all that really matters.” —[Eduard](#)

“To clarify: Editing out extra noise (breaths, mouth clicks, dead air, etc.) will never be “significant” to a song’s success—but their systematic removal can actually make a track sound significantly sterile, and therefore worse.” —[Eduard](#)

14 January 2024: “I like leaving a lot of those elements or imperfections in there, it does a lot for the character of the track” —[Julius Geeza](#)

14 January 2024: “I used to chop up and fade every single take when I first started but it felt so unnatural I stopped doing it, I just automate the volume of the gaps down now if they take away too much focus and if they don’t I leave it alone” —[Clayto](#)

EDSAC Initial Orders

abbreviation

programming language

year created: 1949

created by: David Wheeler

predecessors: ENIAC coding system

education

19 March 2023: “Iowa GOP passed a law requiring students take an anti-communism class talk about a redundant law. As if any textbook that isn’t anti communist could ever be approved but board and used in schools ” —[503i7](#)

“Primary, secondary and university education are all free for citizens in Morocco, Botswana,

Tunisia, Mauritius, Algeria, Egypt and Libya.” —[Africa Facts Zone](#)

egcs

keyword: COBOL reserved word (z/OS)

egg producers

21 November 2023: “BREAKING: America’s largest egg producers and industry groups illegally rigged the market to drive up the price of eggs, a jury has found.

Their price-fixing scheme included exporting millions of eggs overseas to drive up U.S. prices around Thanksgiving and Easter.

This antitrust suit covers actions from 1999 to 2008—the egg industry has been fighting it for 12 years.

But as we’ve documented, corporate profiteering by Big Ag is continuing to influence the price of eggs.

“After about 10 hours of deliberation, the jury found that egg producers Cal-Maine Foods and Rose Acre Farms, trade group United Egg Producers and exporting cooperative United States Egg Marketers unlawfully rigged the egg market by coordinating measures including early hen slaughters, exports, cage space increases and bans on cage backfilling, which involved replacing ill or dead laying hens with new ones.

“The verdict tees the parties up for a second trial phase, slated for the Wednesday and Thursday after Thanksgiving, during which the same jury will determine how much to award in damages to Kraft, Kellogg, General Mills and Nestle, who launched their antitrust claims nearly 12 years ago. [...]

“The price-fixing scheme involved various initiatives that restricted hen, and thus egg, supply, and United Egg Producers wanted all members and the entire egg industry to participate, the food companies asserted. The trade group encouraged egg producers to prematurely slaughter still-productive hens and promoted ‘early molting,’ where producers caused hens to lose their feathers and temporarily stop laying eggs by removing feed and water, and keeping them in dark areas, they claimed.”

Egg prices have gone up so much that Dollar Tree says they can’t sell them anymore.

What happened? We looked at what’s driving up the cost of eggs to figure it out.” —[More Perfect Union](#)

egi

keyword: COBOL reserved word (z/OS)

Albert Einstein

“I am, somehow, less interested in the weight and convolutions of Einstein’s brain than in the near certainty that people of equal talent have lived and died in cotton fields and sweatshops.” — Stephen Jay Gould

Einstein’s field equations

“Field Equations: These are Einstein’s equations that describe the fundamental interaction of gravitation as a result of spacetime being curved by matter and energy. They show that the Ricci curvature tensor ($R_{\mu\nu}$) minus half of the metric tensor ($g_{\mu\nu}$) times the scalar curvature R plus the metric tensor times the cosmological constant (Λ) is equal to the stress-energy tensor ($T_{\mu\nu}$) times the gravitational constant (G) times 8 pi divided by the speed of light to the fourth power (c^4). They are the core of the general theory of relativity and allow us to predict the effects of gravity on the geometry of spacetime and the motion of matter.” — [Science Simplified](#)

eject

keyword: COBOL reserved word (z/OS)

elbow

It is claimed that it is not possible to lick your own elbow.

The elbow is not just the pointy end, but the entire joint between the upper and lower arm, so you can lick the inside of your elbow.

Element

keyword: Element (initial cap) JavaScript windows object

elephant

“Elephants carve pathways through seemingly impenetrable bush, create water pools in dried up riverbeds & shape entire ecosystems as they spread seeds. They benefit their environment & those animals that share it with them are the better for their existence.” —[Massimo](#)

elf locks

From 1596, the term elf-locks meant a tangled mass of hair. It was named from the belief that elves messed up one's hair while they slept.

else

keyword: Ada reserved key word

keyword: C keyword

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: PL/I keyword

Clause of IF statement

keyword: Ruby reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

elseif

keyword: PHP reserved word

keyword: SQL reserved word (z/OS)

elsif

keyword: Ada reserved key word

keyword: Ruby reserved word

s

keyword: VHDL reserved key word


See: .email — file extension

Embed

keyword: Embed (initial cap) JavaScript windows object

embeds

keyword: JavaScript windows property

See: .emf  — file extension

emperor penguin

24 August 2023: Warming decimates Antarctica's emperor penguin chicks
Of five sites monitored in the Bellingshausen Sea region, four experienced a 100 percent loss

of chicks, scientists say.—[Aljazeera](#)

EMPTY

keyword: PL/I keyword

Built-in function

emi

keyword: COBOL reserved word (z/OS)

See: .eml — file extension

See: .emix — file extension

empty()

keyword: PHP reserved word (this is a reserved word and not a function)

See: .emz — file extension

enable

keyword: COBOL reserved word (z/OS)

encodeURIComponent

keyword: JavaScript windows method

encodeURIComponent

keyword: JavaScript windows method

See: `_ENCODING_` — Ruby

end

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: PL/I keyword

Statement

keyword: END (all caps) Ruby reserved word

keyword: end (all lower case) Ruby reserved word

keyword: SQL reserved word (z/OS)

keyword: VHDL reserved key word

See: `@end` — Objective C

end-add

keyword: COBOL reserved word (z/OS)

end-call

keyword: COBOL reserved word (z/OS)

end-compute

keyword: COBOL reserved word (z/OS)

enddeclare

keyword: PHP reserved word

end-delete

keyword: COBOL reserved word (z/OS)

end-divide

keyword: COBOL reserved word (z/OS)

end-evaluate

keyword: COBOL reserved word (z/OS)

ENDFILE (file expression)

keyword: PL/I keyword

Condition

endfor

keyword: PHP reserved word

endforeach

keyword: PHP reserved word

endif

keyword: PHP reserved word

end-if

keyword: COBOL reserved word (z/OS)

end-invoke

keyword: COBOL reserved word (z/OS)

end-multiply

keyword: COBOL reserved word (z/OS)

endofdata

keyword: SQL reserved word (z/OS)

end-of-page

keyword: COBOL reserved word (z/OS)

ENDPAGE (file expression)

keyword: PL/I keyword

Condition

end-perform

keyword: COBOL reserved word (z/OS)

end-read

keyword: COBOL reserved word (z/OS)

end-receive

keyword: COBOL reserved word (z/OS)

end-return

keyword: COBOL reserved word (z/OS)

end-rewrite

keyword: COBOL reserved word (z/OS)

end-search

keyword: COBOL reserved word (z/OS)

end-start

keyword: COBOL reserved word (z/OS)

end-string

keyword: COBOL reserved word (z/OS)

end-subtract

keyword: COBOL reserved word (z/OS)

endswitch

keyword: PHP reserved word

end-unstring

keyword: COBOL reserved word (z/OS)

end-write

keyword: COBOL reserved word (z/OS)

ending

keyword: COBOL reserved word (z/OS)

enemy of the good

There is a saying: “Don’t let the perfect be the enemy of the good.”

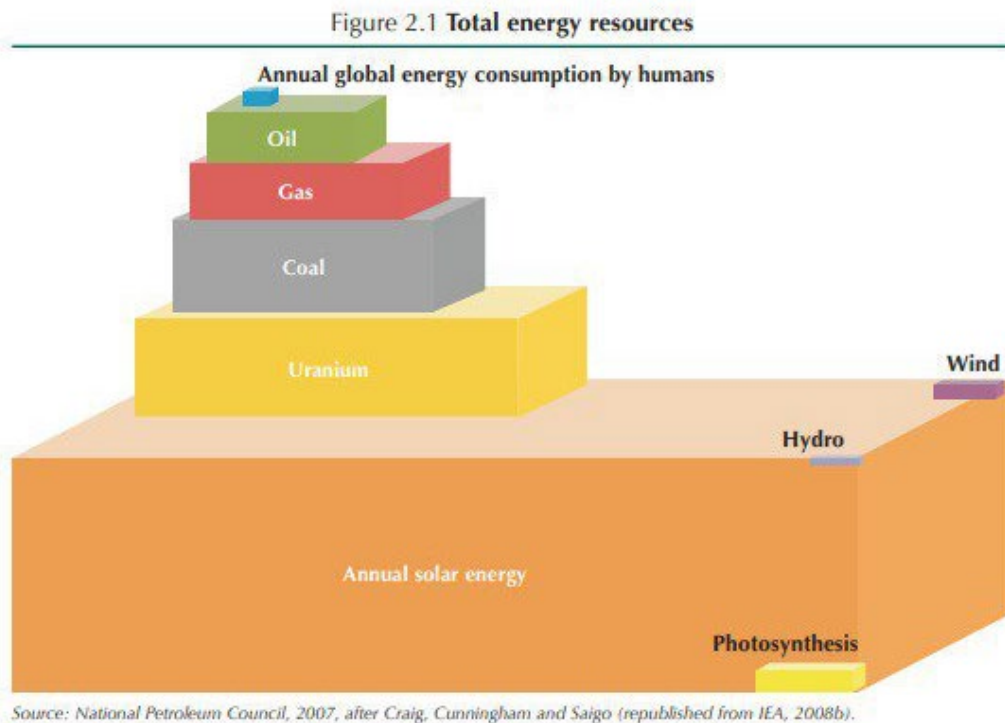
Volaire wrote in 1770 “Il meglio è l’inimico del bene”, a French translation of an old Italian proverb, meaning “the best is the enemy of the good.”

22 July 2023: “One thing you can always count on any time you hear a liberal say the words “don’t let the perfect be the enemy of the good” is that they already have healthcare and aren’t worried about having to spend tomorrow night sleeping on a sidewalk or under a bridge.”

—[Professor Anthony Zenkus](#)

energy

16 December 2023: “The amount of energy used by all humans and industries annually ($\sim 5.67 \times 10^{20}$ joules or ~ 567 exajoules) is equivalent to the amount of solar energy that strikes the earth in the span of only 90 minutes.” —[Massimo](#)



ENIAC coding system

abbreviation

programming language

year created: 1943-1946

created by: John von Neumann, John Mauchly, J. Presper Eckert, Herman Goldstine after Alan Turing. The first programmers of ENIAC were Kay McNulty, Betty Jennings, Betty Snyder, Marlyn Meltzer, Fran Bilas, and Ruth Lichterman.

predecessors: none (unique language)

ENIAC Short Code

abbreviation

programming language

year created: 1946

created by: Richard Clippinger, John von Neumann after Alan Turing

predecessors: ENIAC coding system

ensure

keyword: Ruby reserved word

enter

keyword: COBOL reserved word (z/OS)

entity

keyword: VHDL reserved key word

entropy

“Entropy: This equation defines entropy (S) as the product of the Boltzmann constant (kb) and the natural logarithm of the number of possible microscopic states of a system (Ω). It measures the amount of energy that is unavailable to do work or the degree of disorder in a system.” —[Science Simplified](#)

entry

keyword: Ada reserved key word

keyword: C keyword

keyword: COBOL reserved word (z/OS)

keyword: PL/I keyword

Attribute, statement

enum

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

environment

keyword: PL/I keyword

keyword: COBOL reserved word (z/OS)

Abbreviate: ENV

Attribute

eof

keyword: SQL reserved word (z/OS)

eop

keyword: COBOL reserved word (z/OS)

Epictetus

“Don’t explain your philosophy. Embody it.” —Epictetus

See: .eps 🗂️ — file extension

Jeffery Epstein

“Jeffrey Epstein, Woody Allen, and Noam Chomsky went out to dinner one night. There’s no punchline, that’s just something that happened.” —Caitlin Johnstone

EQ — equalization

23 April 2023: “Vocal EQ cheat sheet

For main vocal, this would be a great starting point to then adjust, but for those who are more experienced you'll naturally apply these things as your mixing and what feels right to the song at hand” —[Solar Heavy](#)

VOCAL EQ

STARTING POINT




- High pass >60Hz to remove unnecessary lows and rumble.
- Cut 200Hz slightly with a wide q to reduce muddy frequencies.
- Boost 500Hz to amplify vowels and make them cut through.
- Cut 5KHz to reduce the harsh sibilances.
- Engage the dynamic EQ mode in FF-Pro q3 so that my eq is smart and cuts only when the sibilances hit the threshold.
- Boost >8k with high shelf filter to add some air

5 July 2023: “EQ cheat sheet” — [Solar Heavy](#)

FREQUENCY

30HZ



Up to 30Hz is the frequency range people usually leave untreated properly. This range can be the reason your mixes are not loud enough.

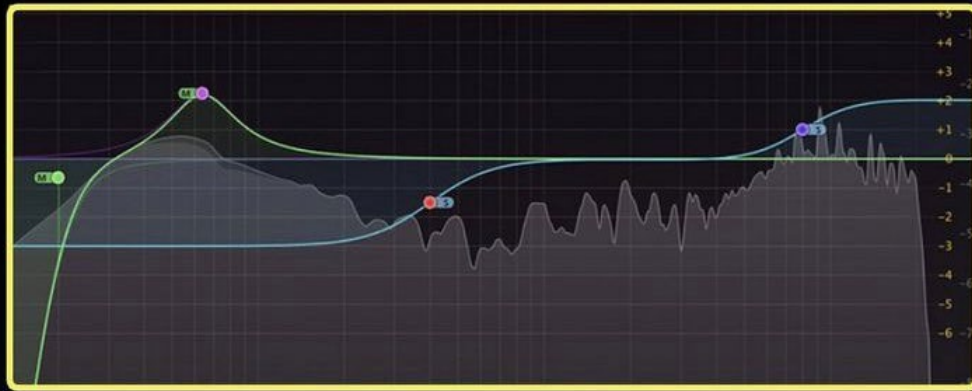
This frequency range is where you'll find a lot of energy since the sub frequencies are located here. If this area is not equalized/balanced & compressed properly so it's tight and clear, you'll end up with a quiet mix and a frequency range that takes a lot of headroom.

5 July 2023: “Goes as low as 20. 20hz is the lowest audible range. Using a brick wall around 19 will increase the energy of your sub. That’s where the shaking comes. I prefer as much sup as possible and that 20-30 hz range helps. A boost in that area works. Logic compressors of frequency compression.” —[Blake Proffit](#)

11 July 2023: “Mid side EQ cheat sheet” —[Solar Heavy](#)

MID SIDE EQ

ON A DRUM BUS



- *The example above attenuates the side channel at 400 Hz to keep the kick mono and focused.*
- *A high-shelf filter is boosting side frequencies at 8.000 Hz to add width*
- *Lastly, a bell filter boosting the mid channel at 65 Hz adds presence and weight to the kick drum.*

Now, there is more space for the kick to cut through the mix

24 July 2023: “Eq cheat sheet” — [Solar Heavy](#)

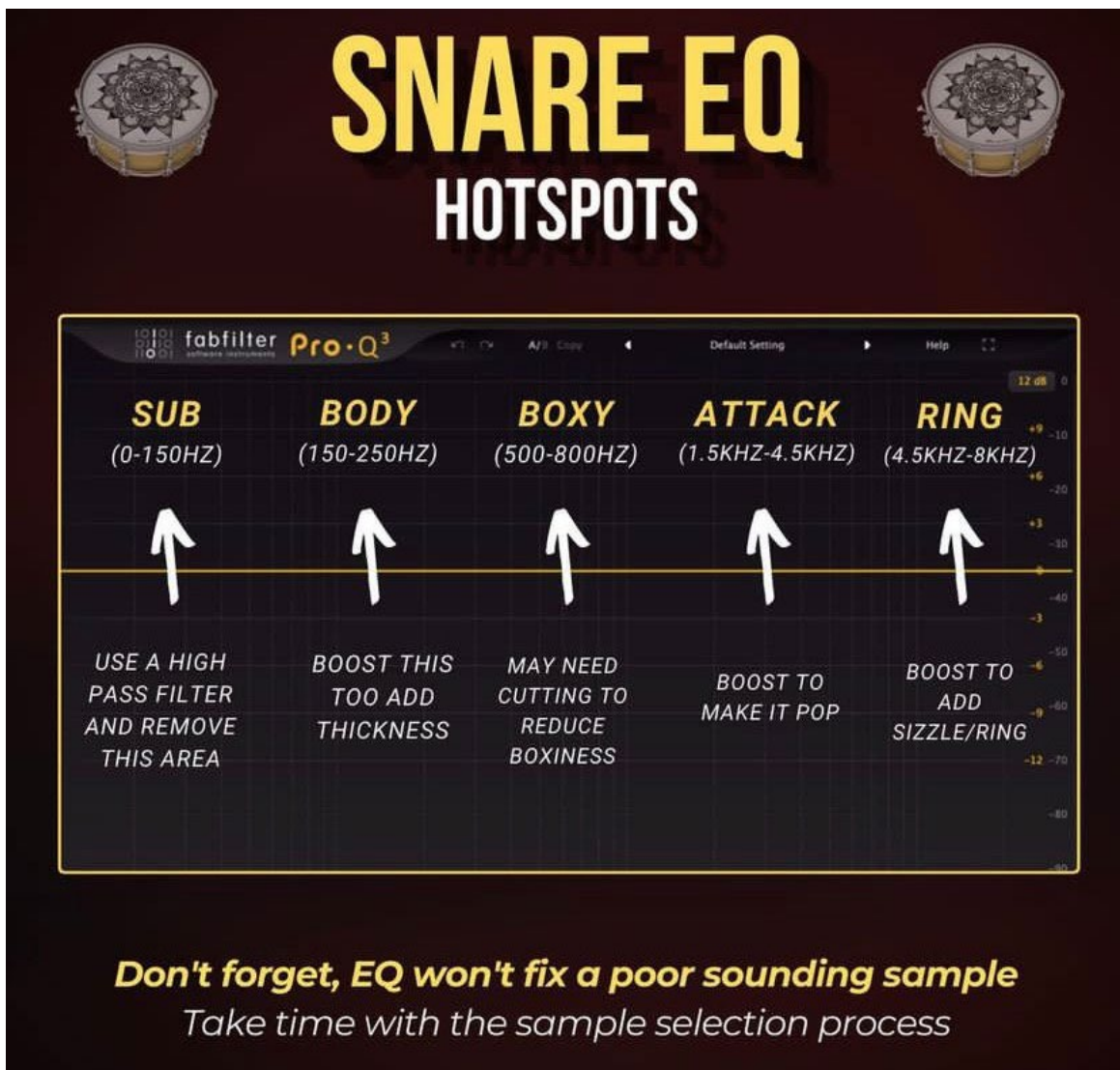
GET RID OF MUDDY FREQS.



Muddiness typically occurs in the low-mids, 200-500Hz.

- Step 1** Start by creating a bell shape, a narrow Q boost. Don't be afraid to boost it to a good amount.
- Step 2** Sweep through between 200-500Hz. Stop when you reach a point where it sounds really bad.
- Step 3** Flip the boost to 1-3dB cut.
- Step 4** Repeat this again & again till you get rid of all or most of the annoying freqs. You will see that your mix has now become more clean & mudless.

1 September 2023: “snare eq cheat sheet” — [Solar Heavy](#)



SNARE EQ HOTSPOTS

The graphic features two snare drum icons at the top corners. The central part is a screenshot of the FabFilter Pro-Q3 EQ interface, which is divided into five frequency bands: SUB (0-150HZ), BODY (150-250HZ), BOXY (500-800HZ), ATTACK (1.5KHZ-4.5KHZ), and RING (4.5KHZ-8KHZ). Each band has a corresponding frequency range and a set of instructions with an upward-pointing arrow indicating where to boost or cut. The interface also shows a gain scale on the right ranging from -12 dB to 0 dB.

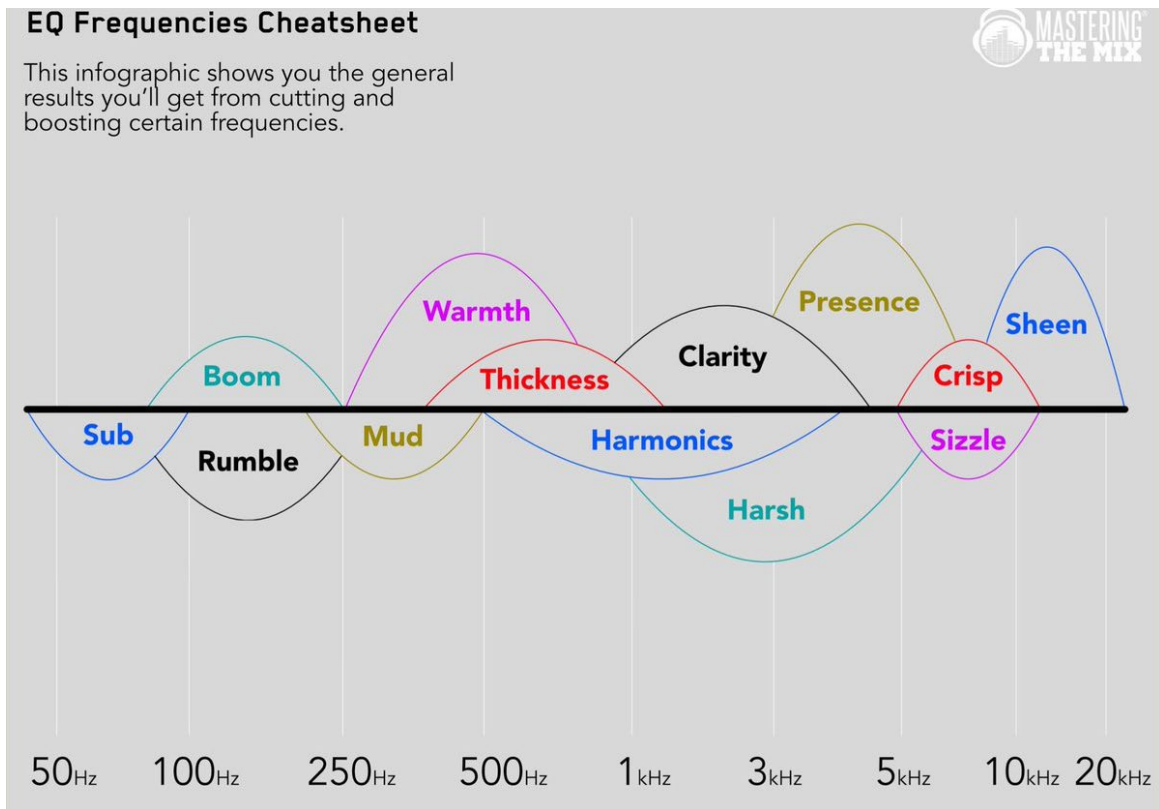
BAND	FREQUENCY RANGE	INSTRUCTIONS
SUB	(0-150HZ)	USE A HIGH PASS FILTER AND REMOVE THIS AREA
BODY	(150-250HZ)	BOOST THIS TOO ADD THICKNESS
BOXY	(500-800HZ)	MAY NEED CUTTING TO REDUCE BOXINESS
ATTACK	(1.5KHZ-4.5KHZ)	BOOST TO MAKE IT POP
RING	(4.5KHZ-8KHZ)	BOOST TO ADD SIZZLE/RING

Don't forget, EQ won't fix a poor sounding sample
Take time with the sample selection process

2 September 2023: “kick eq cheat sheet” — [Solar Heavy](#)



18 September 2023: “eq cheat sheet” — [Solar Heavy](#)



19 September 2023: “Oooh that’s where the rumble is” — [Hakujiin](#)

23 September 2023: “808 eq cheat sheet” — [Solar Heavy](#)


808 EQ CHEATSHEET



- Use a low shelf filter to remove low-end rumble between 0-30hz
- Boost around 40-80Hz if your 808 lacks energy
- Look for unwanted freqs between 100-150Hz & use a small Q to cut them out
- Boost around 200-250Hz if your 808 lacks punch
- Usually there is nothing going in the top-end of 808s, but sometimes you can find the transient between 2-kHz

18 November 2023: “eq cheat sheet” — [Solar Heavy](#)

250HZ

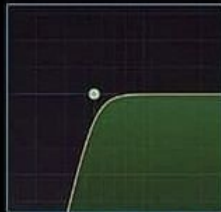


This is a frequency range that causes the most problems when mixing since a lot of instruments are masking each other in this frequency range.

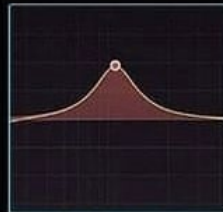
By attenuating around this area on certain instruments you can fix masking and reduce potential boominess in your mix. However, if you cut too much, your mix will become thin and lifeless. Be careful.

16 November 2023: “eq terminology cheat sheet” — [Solar Heavy](#)

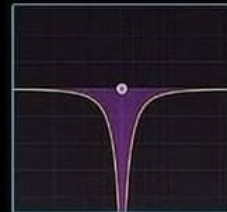
EQ FILTERS EXPLAINED



HIGH PASS
To cut unwanted
low frequencies



BELL
To boost musical
resonances



NOTCH
To cut unwanted
resonances



LOW PASS
To cut unwanted
high end frequencies



LOW SHELF
To boost or cut
a set of low
frequencies



HIGH SHELF
To boost or cut
a set of high
frequencies

5 December 2023: “Pro EQ tip

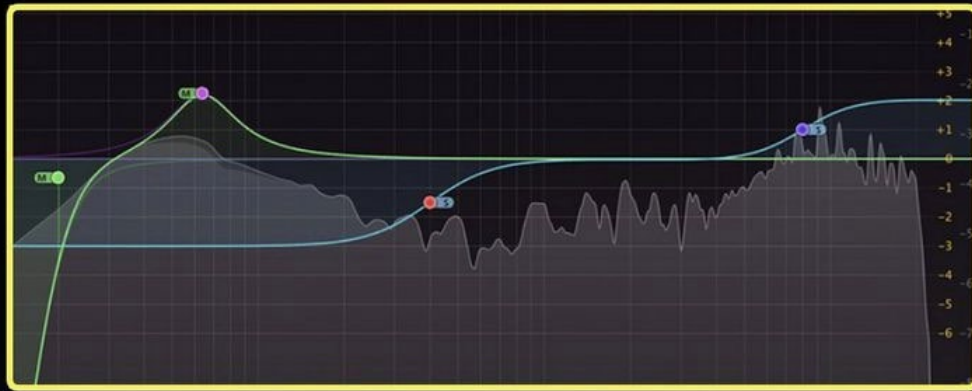
Cutting lows and highs on background vocals usually is a good idea

This will make them more naturally “background”, since in reality lows and highs perceive much worse as distance increases” — [Nathaniel W.](#)

16 December 2023: “eq cheat sheet” — [Solar Heavy](#)

MID SIDE EQ

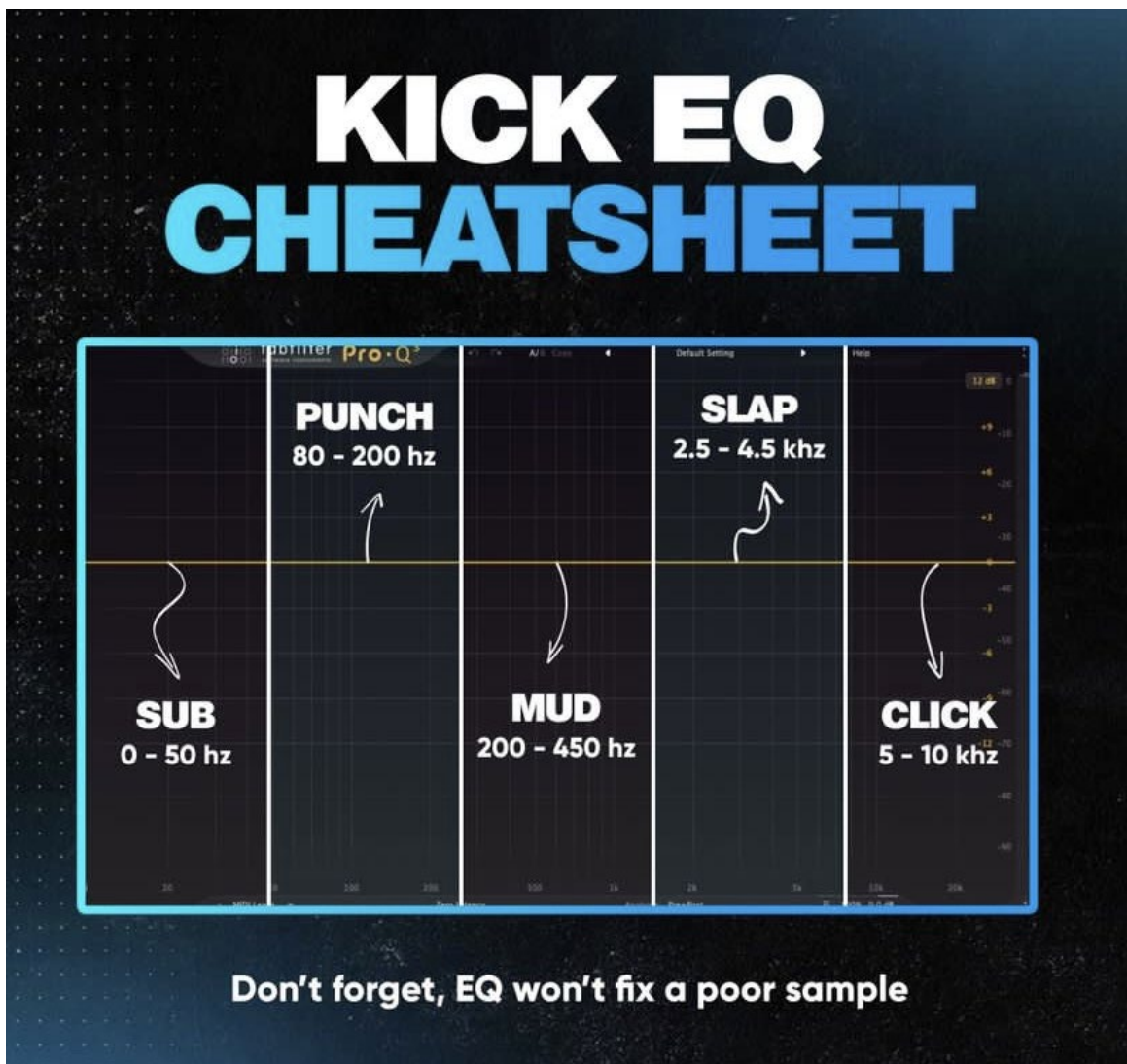
ON A DRUM BUS



- *The example above attenuates the side channel at 400 Hz to keep the kick mono and focused.*
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- *Lastly, a bell filter boosting the mid channel at 65 Hz adds presence and weight to the kick drum.*

Now, there is more space for the kick to cut through the mix

27 December 2023: “eq cheat sheet” — [Solar Heavy](#)



28 December 2023: “Pro EQ tip

My technique that I used to find problematic areas

For now, I identify which frequency area contains the problem pretty quick

But it wasn't always like that. And I developed my method to identify those frequencies.

First of all, create a bell filter with pretty wide Q and cut it very hardly

Using broad Q, move your filter left and right, finding in which area your problem disappears. Then narrow down the Q to search in this area. And repeat the process. Most likely you will find the problem here. But if you still cut useful information along with the problem, narrow down the Q once again and repeat the process.

Remember, you shouldn't cut nothing useful, only problematic areas.” —[Nathaniel W.](#)



10 January 2024: “Best all-around EQ plugins

- Fabfilter Pro-Q 3
- DMG Equilibrium
- Kirchhoff EQ
- SSL X-EQ 2
- Slate Infinity EQ

Honorable mention: your DAW stock EQ.” — [Nathaniel W.](#)

See: vocal EQ

equal

keyword: COBOL reserved word (z/OS)

equinox



Equinox at the Pyramid of the Feathered Serpent

Image Credit & Copyright: Robert Fedez

19 March 2023: **Explanation:** To see the feathered serpent descend the Mayan pyramid requires exquisite timing. You must visit El Castillo -- in Mexico's Yucatán Peninsula -- near an equinox. Then, during the late afternoon if the sky is clear, the pyramid's own shadows create triangles that merge into the famous illusion of a slithering viper. Also known as the Temple of Kukulcan, the impressive step-pyramid stands 30 meters tall and 55 meters wide at the base. Built up as a series of square terraces by the pre-Columbian civilization between the 9th and 12th century, the structure can be used as a calendar and is noted for astronomical alignments. The featured composite image was captured in 2019 with Jupiter and Saturn straddling the diagonal central band of our Milky Way galaxy." — [Astronomy Picture of the Day](#)

ERF(x)

keyword: PL/I keyword

Built-in function

ERFC(x)

keyword: PL/I keyword

Built-in function

Eritrea

25 August 2023: “Eritrean President, Isaias Afwerki at the 15th Annual BRICS Summit:

“US Exceptionalism (or PAX AMERICANA) has unleashed malaises that have gravely impaired global progress for almost a century now...

The tendency for unbridled escalation of the War in Ukraine led by the United States and NATO is fraught with consequences that are ghastly to contemplate.

Yet, the US and its allies continue to doggedly pursue this perilous path in a desperate attempt to turn back the clock of history and assert what they term as their “unassailable global superiority and dominance”...

Illegal and unilateral sanctions; weaponization of US dominated financial, economic and judicial institutions; as well as other punitive instruments in their toolbox are routinely invoked to punish those who do not toe the line.

These suffocating and malicious policies are embellished by high-sounding phrases in order to claim the moral high ground. They are also propagated extensively through their wide and subservient media outlets

But for all their efforts, these misguided and reckless policies have and continue to engender robust and growing popular resistance in all corners of the world.”

The whole plan of the west was to isolate and weaken Russia. Now, look who's in the minority.

Welcome to the multipolar world, guys!” —[J. C. Okechukwu](#)

error

keyword: COBOL reserved word (z/OS)

keyword: PL/I keyword

Condition

escape

keyword: JavaScript depreciated function

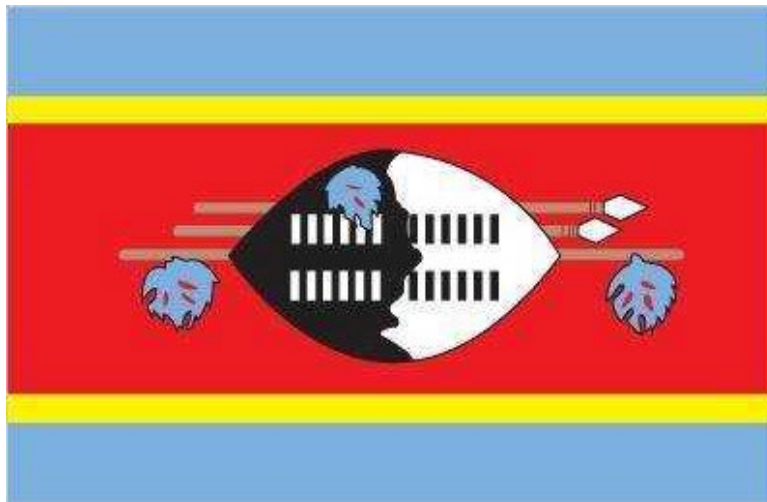
keyword: SQL reserved word (z/OS)

esi

keyword: COBOL reserved word (z/OS)

Eswatini

17 December 2023: “The national flag of the African nation of Eswatini shows three horizontal bands of blue (top), red (triple width), and blue (bottom), with the red band edged in yellow. Horizontally centered on the flag is a red band and a large black and white shield covering two spears and a staff decorated with feather tassels. The blue band stands for peace and stability, red represents past struggles, and yellow signifies the mineral resources of the country. The shield, spears, and staff symbolize protection from the country’s enemies, while the black and white of the shield are meant to portray black and white people peacefully coexisting.” — CIA World Factbook (material that expires after 30 days)



Ethiopia

“Ethiopia is Africa’s oldest country. Originally founded in 980 BCE, Ethiopia is the oldest independent nation on the continent. Additionally, Ethiopia has remnants of some of the most ancient human beings on earth dating back millions of years making it one of the most important archaeological areas in the world. Not only that, but it is Africa’s second most populated country with more than 106 million people.” — [Typical African](#)

1960: “In 1960, an Ethiopian named Abebe Bikila became the [first Black African to win gold](#)

in the Olympics. He won it by running barefoot.” —[Typical African](#)

25 August 2023: “Why Ethiopia? Saudi Arabia, Iran, UAE, Argentina, even Egypt - everything is clear. But why Ethiopia and not, say, Algeria?

Because it is a direct appeal to the rest of Africa. Moreover, the appeal is at the level of historical feeling.

What is the Federal Democratic Republic of Ethiopia? It is not only, for a moment, 116 million people. And not only the key role in the organization of the African Union (AU) and its prototype, the Organization of African Unity, which was founded in 1963 in Ethiopia. In this sense, Addis Ababa, where the AU headquarters is located, is in a certain sense an analog of the European Brussels.

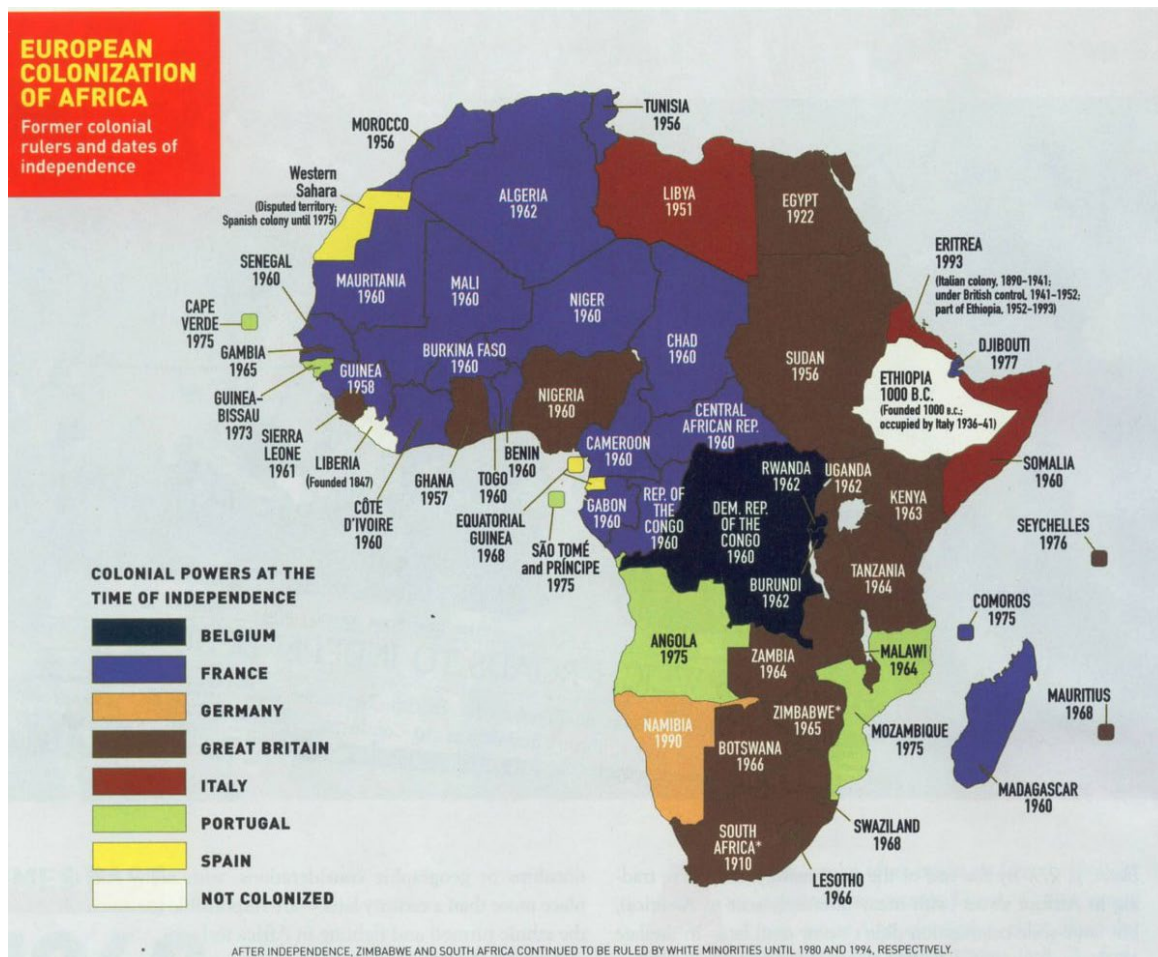
But why is the headquarters located there? This is no accident, right? Right.

One of the most obvious answers is this: Ethiopia is the only country on the African continent that has never been a European colony. Orthodox Ethiopia has always remained sovereign - except for a brief period of Italian occupation from 1936-1941 and the rule of Anglo-American òliberatorsÓ from 1941-44.

As far back as the end of the 19th century, it was Ethiopia that, in fact, stopped the advance of British colonialism in Africa (the Rodd Treaty of 1897). The year before, having defeated another European power - Italy. By the way, already in 1898, Ethiopia became the first country on the continent with which Russia established diplomatic relations.

There simply could not be a louder signal for the entire Black Continent than the admission of Ethiopia to the BRICS.

— Elena Panina, director of RUSSTRAT Institute” —[Apocalypsis Apocalypeos](#)



Mount Etna

13 January 2024: “With a name that ironically translates into “I burn” from the Greek Aitne, Mount Etna in Sicily is Europe’s most-active volcano (erupting for 500,00 years) and one of the largest volcanoes in the world. Its fiery lava flows have created fertile soils that support extensive agriculture, with vineyards and orchards spread across the lower slopes of the mountain. At 3,357 m (11,014 ft), Mount Etna is the tallest Mediterranean island mountain and, in 2013, UNESCO declared it a World Heritage site.” —CIA World Factbook (material that expires after 30 days)



Eugene

18 March 2023: “don’t you dare sleep on @eugeneiseugene especially if you like dark, heavy bass music. The man is a prodigy.” —[Ooga](#)

Euler’s identity

“Euler’s Identity: This equation establishes a relationship between the some fundamental numbers in mathematics: e , i , π , 1, and 0. It shows that raising the natural base (e) to the power of the product of the imaginary number (i) and the ratio of a circle’s circumference to its diameter (π) results in -1 , which when added to 1 gives 0.” —[Science Simplified](#)

See: Euler's Number

eval

keyword: JavaScript reserved word

eval()

keyword: PHP reserved word (this is a reserved word and not a function)

evaluate

keyword: COBOL reserved word (z/OS)

Event

keyword: Event (all caps) JavaScript windows Object

EVENT

keyword: PL/I keyword

Attribute, option of CALL, DELETE, DISPLAY, READ, REWRITE, WRITE statements

every

keyword: COBOL reserved word (z/OS)

eviction

from 1948: “The story behind the infamous “4 Children for Sale” photograph in 1948 is heartbreaking.

Lucille Chalifoux, the mother in the photo, was facing eviction from her apartment and, with no other options, made the difficult decision to sell her four children.

The photo captured the attention of the public when it was published in the local newspaper.

Offers of support and job opportunities poured in, but unfortunately, they were not enough to save the children from their challenging fate.

The youngest child, David, was adopted by Harry and Luella McDaniel, who provided him with a stable and safe home.

While his upbringing was strict, he eventually found stability and served in the military for 20 years before working as a truck driver.

However, the older siblings, RaeAnn and Milton, had a much more harrowing experience. They were sold to a couple named John and Ruth Zoeteman, who treated them as property rather than children.

They were chained up in a barn and subjected to physical and emotional abuse. RaeAnn, in particular, had a traumatic upbringing, including an incident of kidnapping, rape, and pregnancy in her teenage years.

Despite their hardships, both RaeAnn and Milton were able to reconnect as adults.

Unfortunately, their sister Lana passed away before they could reunite.

Another sibling, Sue Ellen, was in the late stages of lung disease at the time of the reunion but could express her love for her siblings through written communication.

Sue Ellen’s words for the birth mother that sold them: “She needs to be in hell burning.”” ”

—[Fascinating](#)



13 October 2023: “My son’s friend who lives down the road is being evicted by their bank. My son has been over there for two days, they towed 4 cars onto our property and filled every bed of our trucks.

They are panicking because the auction is tomorrow.

I hate that.” —[The Rob Paradigm](#)

except

keyword: SQL reserved word (z/OS)

exception

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

exclusive

keyword: SQL reserved word (Oracle)

keyword: PL/I keyword

Attribute

See: [.exe](#) — file extension

exists

keyword: SQL reserved word (Oracle)

exit

keyword: Ada reserved key word

function: C library function: stands for program EXIT

keyword: COBOL reserved word (z/OS)

keyword: PL/I keyword

Statement

keyword: VHDL reserved key word

exit()

keyword: PHP reserved word (this is a reserved word and not a function)

See: `_exit` — C library function

exp

function: C math.h library function: stands for EXponential

EXP(x)

keyword: PL/I keyword

Built-in function

export

keyword: JavaScript reserved word

See: `EXT` — PL/I

extend

keyword: COBOL reserved word (z/OS)

extends

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

EXTENTNUMBER (n)

keyword: PL/I keyword

Option of ENVIRONMENT attribute

extern

keyword: C keyword: storage class

keyword: Objective-C reserved word

external

keyword: COBOL reserved word (z/OS)

keyword: PL/I keyword

Abbreviated: EXT

Attribute

extinction

19 November 2023: “If the current course is not altered, we’ll reach 9 to 15 billion (likely the former) by 2050.

“We’re in the midst of a the Earth’s sixth mass extinction crisis. Harvard biologist E. O. Wilson estimated that 30,000 species per year (or three species per hour) are being driven to extinction. Compare this to the natural background rate of of one extinction per million species per year, and you can see why scientists refer to it as a crisis unparalleled in human history.”

Source: Center for Biological Diversity ” —[Stephanie Voltolin](#)

F f

F

ASCII: 46 hex

UNICODE: LATIN CAPITAL LETTER F

f

ASCII: 66 hex

UNICODE: LATIN SMALL LETTER F

F

keyword: PL/I keyword

Option of ENVIRONMENT attribute

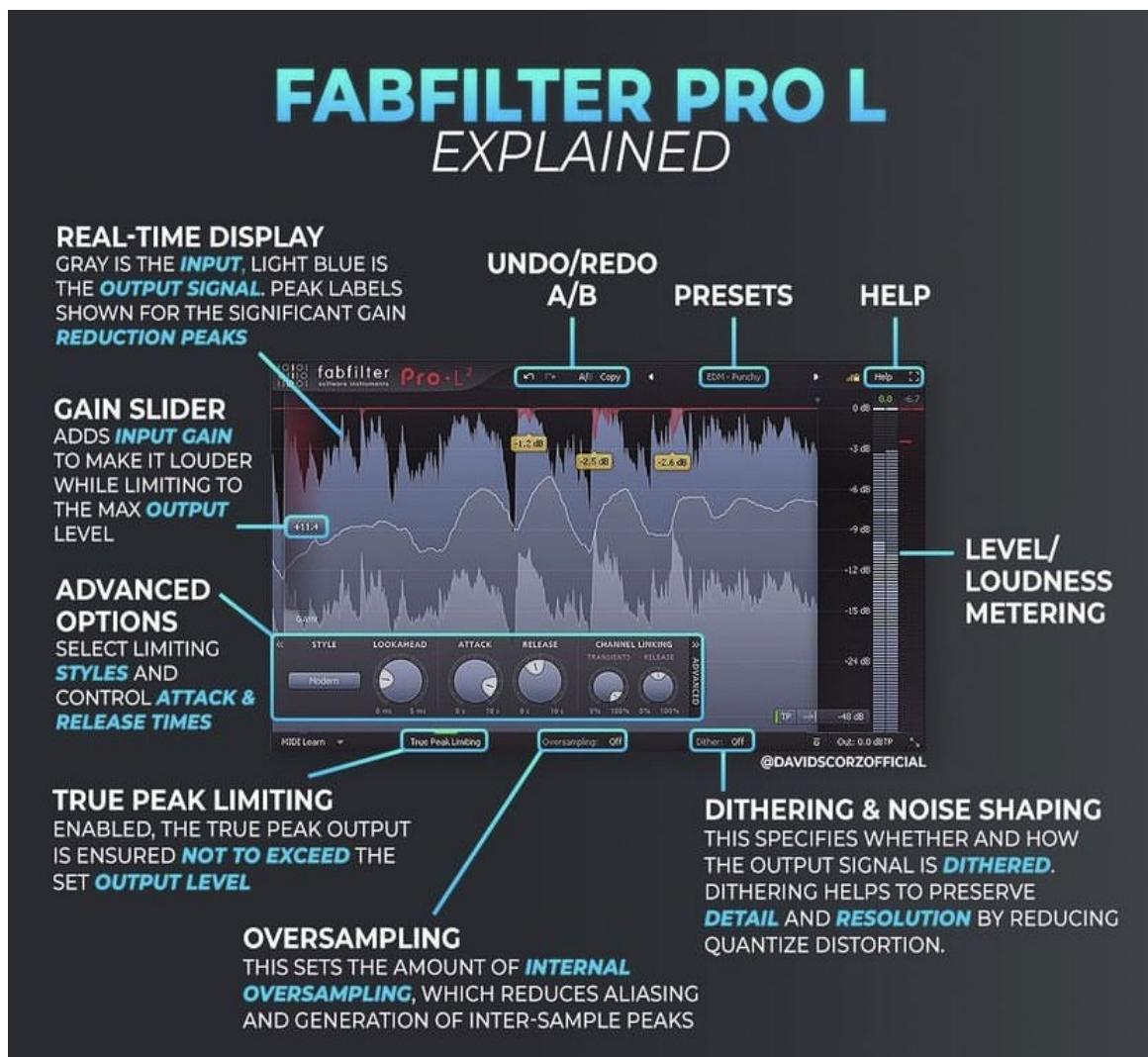
F (x[,y[,z]]))

keyword: PL/I keyword

Format item

Fabfilter Pro L

5 November 2023: "Fabfilter Pro L explained" — [Solar Heavy](#)



fabs

function: C math.h library function: stands for Float ABSolute value

Faiyum

Faiyum, Egypt, is about 6,000 years old.

logical fallacies

Fallacies are fake or deceptive arguments, “junk cognition,” that is, arguments that seem irrefutable but prove nothing. Fallacies often seem superficially sound and they far too often retain immense persuasive power even after being clearly exposed as false. Like epidemics, fallacies sometimes “burn through” entire populations, often with the most tragic results, before their power is diminished or lost. Fallacies are not always deliberate, but a good scholar’s purpose is always to identify and unmask fallacies in arguments. Note that many of these definitions overlap, but the goal here is to identify contemporary and classic fallacies as they are used in today’s discourse. Effort has been made to avoid mere word-games (e.g., “The Fallacist’s Fallacy,” or the famous “Crocodile’s Paradox” of classic times), or the so-called “fallacies” of purely formal and symbolic, business and financial, religious or theological logic. No claim is made to “academic rigor” in this listing. [Note, his list of fallacies is in alphabetical order in the main dictionary section.]

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Fallacies are statements that might sound reasonable or true but are actually flawed or dishonest. When readers detect them, these logical fallacies backfire by making the audience think the writer is (a) unintelligent or (b) deceptive. It is important to avoid them in your own arguments, and it is also important to be able to spot them in others’ arguments so a false line of reasoning won’t fool you. Think of this as intellectual kung-fu: the vital art of intellectual self-defense.

—from Dr. L. Kip Wheeler’s (Carson-Newman University) *Logical Fallacies Handlist*

See: a priori argument

See: fallacies of relevance

false

keyword: COBOL reserved word (z/OS)

keyword: Java reserved literal value word

keyword: JavaScript reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (z/OS)

Famicon

17 October 2023: “First released in Japan in 1983, the Family Computer, commonly referred to as Famicom, was redesigned to become the NES, which was released in American test markets Today in 1985, and was soon fully launched in North America and other countries.” —[Massimo](#)



Faraday's Law

“Faraday's Law: This equation describes how a changing magnetic field can induce an electric current. It shows that the curl of the electric field (E) is equal to the negative of the time derivative of the magnetic field (B). It implies that a loop of wire will experience an electromotive force when exposed to a varying magnetic field.” —[Science Simplified](#)

fascism

The word “fascism” was invented by Benito Mussolini. It means the merger of state and corporate power. Mussolini once said, “Fascism should more properly be called corporatism, because both believe in the merger of corporate and government power.”

The Federal Election Campaign Act (FECA) of 1971 was signed into law by then President Richard Nixon on 7 February 1972. It made it legal for corporations to make political campaign donations. Once the Republican and Democratic parties started accepting corporate campaign donations in trade for adopting corporate legislative goals, the US became literally fascist.

“We already live in a structurally fascist country. The legislative and legal underpinnings were put in place by both parties over the last 30 years. The difference between them is the GOP wants you to embrace it and the DNC would like you to pretend it’s not true.” —[@mousedrvr](#)

See: **fats**

fatigue

A common cause of fatigue among teenagers is “phase shift”. Phase shift is the result of growth hormones during the teenage years resetting the circadian clock (the inner biological clock) so that the teenager naturally needs to stay up late at night and rise late in the morning.

Schools typically ignore this biological factor, which greatly reduces the effectiveness of education. Rather than dealing with the real biology and enhance the educational process, school administrators raised in the Christian Protestant ethic believe that suffering is somehow good for the soul and demand that teenagers suffer physically and educationally just to satisfy the perverse sadism demanded by Christian beliefs.

Some of the causes of tiredness include: deficiency of [calcium](#) and [zinc](#).

“Signs of [zinc](#) deficiency include growth retardation, hair loss, diarrhea, delayed sexual maturation and impotence, eye and skin lesions, and loss of appetite”, according to [the U.S. National Institutes of Health](#). “There is also evidence that weight loss, delayed healing of wounds, taste abnormalities, and **mental lethargy** can occur. Since many of these symptoms are general and are associated with other medical conditions, do not assume that they are due to zinc deficiency. It is important to consult with a medical doctor about medical symptoms so that appropriate case can be given.”

Leakage (including microleakage) from silicone breast implants can cause fatigue, short-term memory loss, joint and muscle pains, skin rashes, disturbed sleep patterns, depression, and hair loss, according to Dallas surgeon Edward Melmed in his article “Big Breasts, Big Risks” in the Los Angeles Times on January 3, 2007.

Chronic fatigue syndrome is one of the conditions reported by the state of California as grounds for insurance companies to charge unreasonably high premiums or to outright reject providing health insurance, according to a front page article by Lisa Girion in the December 31, 2006, *Los Angeles Times*.

FB

keyword: PL/I keyword

Option of ENVIRONMENT attribute

FBS

keyword: PL/I keyword

Option of ENVIRONMENT attribute

fclose

function: C stdio.h library function: stands for File CLOSE

fd

keyword: COBOL reserved word (z/OS)

fear campaign

27 November 2023: “Oh bullshit. Nobody around the world feared Trump. Nobody. They all laughed at him.” —[Joe Walsh](#)

My reply: A campaign of fear is a horrible way to run foreign policy.

You dramatically increase the number and kinds of opposition and there is no way to permanently keep the world covered by your campaign of fear.

Dianne Feinstein

“Nancy Pelosi doesn’t want Dianne Feinstein to resign because Gavin Newsome would appoint her successor and he said he’d chose a black woman, most likely Barbara Lee. So

Pelosi's daughter is propping up an 89 yo woman who didn't even remember being absent from the Senate for 3 mo." —[Professor Anthony Zenkus](#)

fantanyl

7 July 2023: "“Fentanyl exposure” is not a real thing and media is irresponsible to keep pretending it is. “Fentanyl exposure” has **literally** never happened and is scientifically impossible. I explained this in depth here because of how pervasive this harmful myth is: [YouTube video: The Myth\(s\) of Fentanyl Exposure](#)" —[Ryan Marino, MD](#)

7 July 2023: "Overdoses while incarcerated are a huge problem because US jails and prisons most often don't allow any evidence-based medical treatments. That could be fixed very easily." —[Ryan Marino, MD](#)

"For everyone else - as long as they're not intentionally ingesting drugs - then there is no risk of fentanyl." —[Ryan Marino, MD](#)

15 August 2023: "So you're saying that handling fentanyl powder is not a risk?"

Yes. I am literally always saying this.

"This has never happened. There has never been an overdose through skin contact or accidentally inhaling fentanyl." said Dr. Ryan Marino, a toxicologist and emergency room physician who studies addiction at Case Western Reserve University. —[Ryan Marino, MD](#)

feodality

"FEODALITY — Government of a feudal nature where each successive layer of authority derives power and authority from the one above and pledges fealty likewise." —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

feof

function: C stdio.h library function: stands for File End Of File

ferror

function: C stdio.h library function: stands for File ERROR

Feynman point

“The **Feynman point** is the name given to the position in the **decimal expansion of π** where a sequence of **six consecutive nines first appears**. It is named after the physicist **Richard Feynman**, who allegedly joked that he would like to memorize the digits of pi up to that point and then say “*and so on*” as if π . were rational. The Feynman point occurs at the **762nd digit** after the decimal point, which is much earlier than expected by chance.” —[Physics In History](#)

PHYSICS
IN HISTORY

THE FEYNMAN POINT

3.1415926535897932384626433832795028841
 97169399375105820974944592307816406286
 208998628034825342117067982148086513282
 306647093844609550582231725359408128481
 117450284102701938521105559644622948954
 930381964428810975665933446128475648233
 786783165271201909145648566923460348610
 454326648213393607260249141273724587006
 606315588174881520920962829254091715364
 367892590360011330530548820466521384146
 951941511609433057270365759591953092186
 117381932611793105118548074462379962749
 567351885752724891227938183011949129833
 673362440656643086021394946395224737190
 702179860943702770539217176293176752384
 674818467669405132000568127145263560827
 785771342757789609173637178721468440901
 224953430146549585371050792279689258923
 542019956112129021960864034418159813629
 77477130996051870721134**999999**...

fflush

function: C stdio.h library function: stands for File FLUSH

fgetc

function: C stdio.h library function: stands for File GET Character

fgets

function: C stdio.h library function: stands for File GET String

fiance

In French the words were fiancé (male) and fiancée (femlae). This used to be the case in English, but now just fiance is used.

Fibonacci numbers

“Did you know?

You can use Fibonacci numbers to roughly convert miles into km and viceversa.

If you need to convert from km to miles, you just need to find the preceding Fibonacci number.

Why? There are 1.609 km in a mile, very close to the Golden Ratio, derived by dividing each number of the Fibonacci series by its immediate predecessor.” —[Massimo](#)

Miles	Approx km	Exact km
3	5	4.83
5	8	8.04
8	13	12.87
13	21	20.92
21	34	33.80
34	55	54.71
55	89	88.51

fig

Ficus carica, plant of the mulberry family (Moraceae), and its edible fruit.

file

FILE: C: data type defined in stdio.h

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

keyword: VHDL reserved key word

See: `_FILE_` — PHP and Ruby

file-control

keyword: COBOL reserved word (z/OS)

fileUpload

keyword: JavaScript windows method

filler

keyword: COBOL reserved word (z/OS)

final

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

finally

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

See: [@finally](#) — Objective C

fire (element)

Fire is one of the four Western elements (fire, earth, air, water).

firearm

noun “Any device designed to be used as a weapon from which a projectile is expelled through the barrel, by force of any explosion or other form of combustion (Penal Code Section 16520)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

FireBrick

keyword: HTML color name



Fire OS

operating system

Proprietary OS by Amazon

fireworks

“The first ingredient of any firework is the ancient explosive black powder, made by 75% potassium nitrate, 15% charcoal and 10% sulfur. Once lit with a fuse or spark, the sulfur melts first at 112.8°C.

The sulfur flows over the potassium nitrate and charcoal, which then burn. This combustion reaction quickly produces a large amount of energy and gas. In other words, an explosion.

But the colors of the fireworks are determined by the elements used.

There are a number of different elements that, when added to a firework and heated, release different wavelengths of light that appear as different colors:

- Strontium makes red.

- Calcium produces orange.
- Sodium releases a yellow color.
- Barium burns green.
- Copper is blue.” —[Massimo](#)



first

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

fish

The singular and plural of “fish” is “fish”.

When more than one species of fish is involved, then the plural becomes “fishes”.

fishing

My grandfather on my father’s side loved would go down to the dock after dinner (he lived on a river) and fish. One day I asked if I could go fishing with him. My grandmother said “no”, because that was something he did alone, but my grandfather said I could go if I could stay quiet the whole time.


We both carried a fishing pole down to the dock and stuck a worm on the end and started fishing. After one time asking a question, I stayed quiet. My granddad said we had to stay quiet or we would scare the fish away. We didn’t catch any fish.


After an hour, we returned to his house. On the way back I noted that he never actually caught any fish. He told ne that going down to the dock to fish was the only time he could be alone in his thoughts. At work he was surrounded by other people and at home he was with his wife. At the dock he had an hour to himself and his own thoughts.

F. Scott Fitzgerald

“Let me tell you about the very rich. They are different from you and me. They possess and enjoy early, and it does something to them, makes them soft where we are hard, and cynical where we are trustful, in a way that, unless you were born rich, it is very difficult to understand. They think, deep in their hearts, that they are better than we are because we had to discover the compensations and refuges of life for ourselves. Even when they enter deep into our world or sink below us, they still think that they are better than we are. They are different.” —F. Scott Fitzgerald

See: **fizzy drinks**

See: **.fla**  — **file extension**

See: **.flac**  — **file extension**

flamethrower

“The very existence of flamethrowers proves that sometime, somewhere, someone said to themselves you know, I want to set those people over there on fire, but I’m just not close enough to get the job done.” —George Carlin

flamingo

13 January 2024: “The American flamingo is one of the largest species of flamingo; an average adult stands 1.5 m (5 ft) tall and weighs 1.8-3.6 kg (4-8 lbs). These birds live in the Caribbean and along the northern coast of South America in flocks numbering in the thousands. Their bright pink color comes from their diet of algae and shrimp. The flamingo’s famous pose, standing on one leg, with their head resting on their body and their other leg tucked under the abdomen, actually cuts heat loss through the legs and feet. The pictured flamingos reside at the Bermuda Aquarium, Museum & Zoo (BAMZ), which is owned and operated by the Bermuda Government. The BAMZ is one of the world’s oldest aquariums and an important center for science education, research, and species conservation.” —CIA World Factbook (material that expires after 30 days)



flanger

26 December 2023: “Flanger: Similar to a phaser but creates a more pronounced and sweeping sound by delaying a duplicate signal and modulating its delay time.

Phaser and flanger distort the signal more and can be used as creative effects to create interesting transitions and movement in your mixes.” —[Nathaniel W.](#)

FlexOS

operating system

Proprietary OS by Digital Research, Inc.

1.0 - 2.34, a derivative of Concurrent DOS 286 —[Wikipedia: List of operating systems](#)

DOS

FlexOS 186

operating system

Proprietary OS by Digital Research, Inc.

a variant of FlexOS for terminals —[Wikipedia: List of operating systems](#)

DOS

FlexOS 286

operating system

Proprietary OS by Digital Research, Inc.

a variant of FlexOS for hosts —[Wikipedia: List of operating systems](#)

DOS

FlexOS 386

operating system

Proprietary OS by Digital Research, Inc.

a later variant of FlexOS for hosts — [Wikipedia: List of operating systems](#)

DOS

FlexOS 68K

operating system

Proprietary OS by Digital Research, Inc.

a derivative of Concurrent DOS 68K — [Wikipedia: List of operating systems](#)

DOS

float

keyword: C keyword: data type

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: SQL reserved word (Oracle)

floor

function: C math.h library function: stands for FLOOR of a number

FloralWhite

keyword: HTML color name



See: refined flour

FLOW

keyword: PL/C keyword

Condition as in `ON FLOW BEGIN;`

Diagnostic option of PUT statement as in `PUT FLOW;`

Statement as in `FLOW (15, 20);`

flower

Female plants have a pistil (which includes an ovary) and a stigma (which received pollen during fertilization).

Male plants have a stamen (which includes an anther, which creates pollen) and a filament.

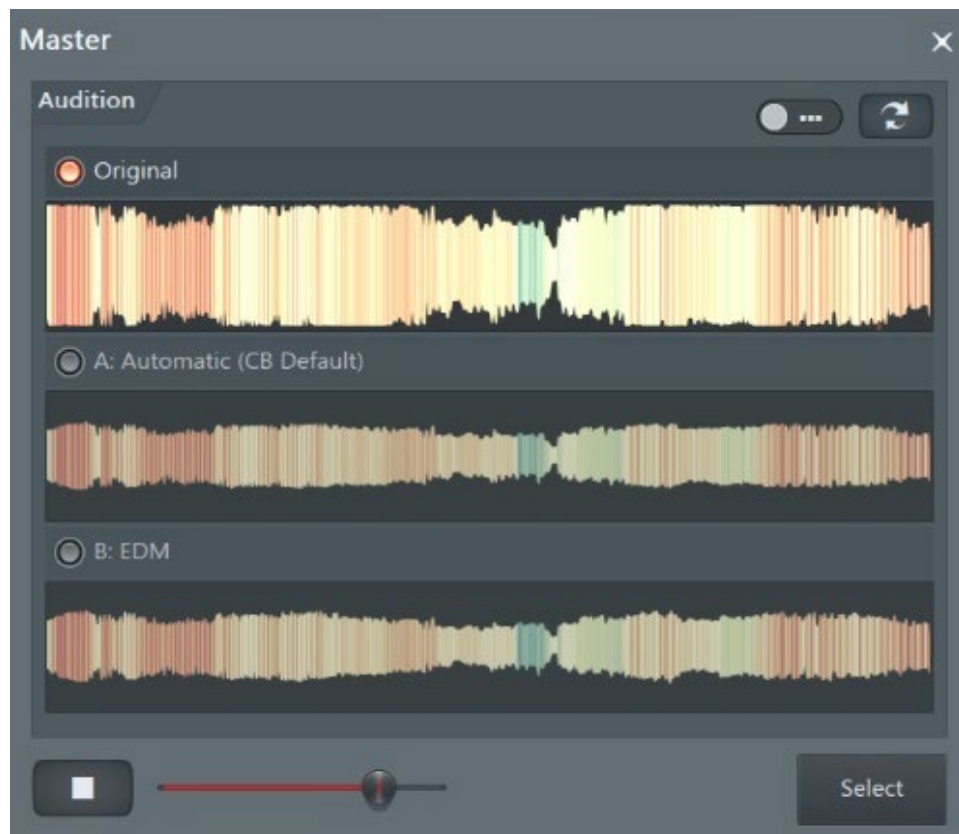
Petals are sterile and attract insects and birds for pollination.

24 August 2023: “The lesson in my daughter’s health class (public school, blue city, blue state) today: “Your body is like a flower and every time you have sex before marriage, it is like pulling off a petal. You should have a full flower to present to your partner on your wedding

night.” ” —[My Aunt Fanny](#)

FL Studio

18 September 2023: “there’s an internal AI Mastering option for the FL Cloud” —[Solar Heavy](#)



31 December 2023: “fl studio cheat sheet” —[Solar Heavy](#)



See: `.flv` 

— file extension

See: FMS — operating system

focus

keyword: JavaScript windows method

fodgel

From 1724 Scots Dialect, fodgel means full figured, as in a full figured woman.

food as a right

On November 9, 2021, the United States and Israel voted against a United Nations committee's draft on the right to food which passed by 180 votes in favor to 2 against. The UN committee expressed alarm that in 2020, “the number of people lacking access to adequate food rose by 320 million ? to 2.4 billion ? amounting to nearly a third of the world’s population, and that between 720 million and 811 million people faced hunger.”



food embargo

17 July 2023: “Russia’s refusal to extend the Black Sea Grain Initiative harms millions of hungry people around the world. Using food as a weapon is unconscionable. We urge Russia to reverse course.” — [US Secretary of State Antony Blinken](#)

18 July 2023: “The US has issued the highest number of food embargoes or sanctions against other countries. According to research by Gary Clyde Hufbauer of PIIE, since the 1950s, the US has initiated eight of the 10 export embargoes involving food.” — [Stephanie Voltolin](#)

In followup tweets in the same thread, Stephanie Voltolin mentions the following examples: “For example, the US imposed a grain embargo on the Soviet Union from 1980 to 1981 in response to the latter invading Afghanistan.”

“In 1973, the US imposed a short-term soybean embargo on the Soviet Union and several Eastern European countries due to concerns over the adverse impact of surging soybean prices on its macroeconomic stability.”

I mentioned that the US currently has economic sanctions against the following nations (the US has admitted it knows that economic sanctions harm ordinary people, especially the poor, and don’t directly affect the powerful, and claim they are causing this suffering to incite a coup):

Belarus
 Burma
 Burundi
 Central African Republic
 Cuba
 Democratic Republic of the Congo (there are two nations named Congo)
 Iran
 Mali
 Nicaragua
 North Korea
 Russia
 Somalia
 South Sudan
 Sudan
 Syria
 Venezuela
 Western Balkans
 Zumbabwe

footing

keyword: COBOL reserved word (z/OS)

fopen

function: C stdio.h library function: stands for File OPEN

for

keyword: Ada reserved key word

keyword: C keyword

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

appeal to force

Appeal to Force: (*Argumentum ad Baculum*, or the “Might-Makes-Right” Fallacy): This argument uses force, the threat of force, or some other unpleasant backlash to make the audience accept a conclusion. It commonly appears as a last resort when evidence or rational arguments fail to convince. Logically, this consideration has nothing to do with the merits of the points under consideration. Example: “Superintendent, it would be a good idea for your school to cut the budget by \$16,000. I need not remind you that past school boards have fired superintendents who cannot keep down costs.” While intimidation might force the superintendent to conform, it does not convince him that the choice to cut the budget was the most beneficial for the school or community. Lobbyists use this method when they remind legislators that they represent so many

thousand votes in the legislators' constituencies and threaten to throw them out of office.

—from Dr. L. Kip Wheeler's (Carson-Newman University) *Logical Fallacies Handlist*

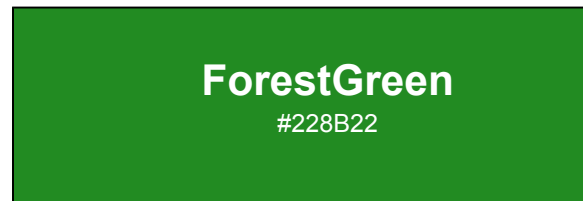
See: fallacies of relevance

foreach

keyword: PHP reserved word

ForestGreen

keyword: HTML color name



forms

keyword: JavaScript windows read-only property

fork

The word fork comes from the Latin *furca*, meaning pitchfork.

Bone forks were found in archaeological sites of the Bronze Age Qija culture (2400-1900 BCE), the Shang dynasty (1600-1050 BCS), and later Chinese dynasties.

FORTAN Monitor System (FMS)

operating system

Proprietary OS by IBM

for the IBM 709 and 7090 — [Wikipedia: List of operating systems](#)

Fountain of the Three Tritons

2 January 2024: “In Malta, the Fountain of the Three Tritons, designed by Vincent Apap, stands outside of the main gate of the capital, Valetta. Fully constructed in 1959, the fountain depicts three bronze half-human, half-mermen & two sitting while the third is kneeling & holding a platter on a seaweed base. They symbolize strength and Malta’s relation to the Mediterranean Sea. In Greek mythology, Triton was Poseidon’s son and messenger of the sea. Over time, Triton(s) came to mean merman(en) in general.” —CIA World Factbook (material that expires after 30 days)



Alberta Four Eyes

“I bought the original of this 1912 photo of my great great grandma Alberta Four Eyes. She is one of my heroes. As a Native woman she faced double the discrimination but she showed them —she was a millionaire and had better business skills than the Whites who hated Native women did.” —[Brett Champman](#)



“My ancestor was one of the Native Americans whose allotment land had oil. Unlike rich Whites, the government controlled every cent of her money. If she wanted to buy her daughter toys, they’d have to approve it as not wasteful because White racism said Natives were irresponsible.” —[Brett Chapman](#)

fprintf


function: C stdio.h library function: stands for File PRINT Function

fputc

function: C stdio.h library function: stands for File PUT Character

fputs

function: C stdio.h library function: stands for File PUT String

See: .fpx  — file extension

Frame

keyword: Frame (initial cap) JavaScript windows object

frames

keyword: JavaScript windows property

frameRate

keyword: JavaScript windows method

France

18 March 2023: “PARIS BURNING: “We beheaded Louis XVI and we can do it again with Macron,” chant protesters at the Place de La Concorde in Paris, where the King was guillotined during the French Revolution.” — [John Moran](#); tweet includes a video

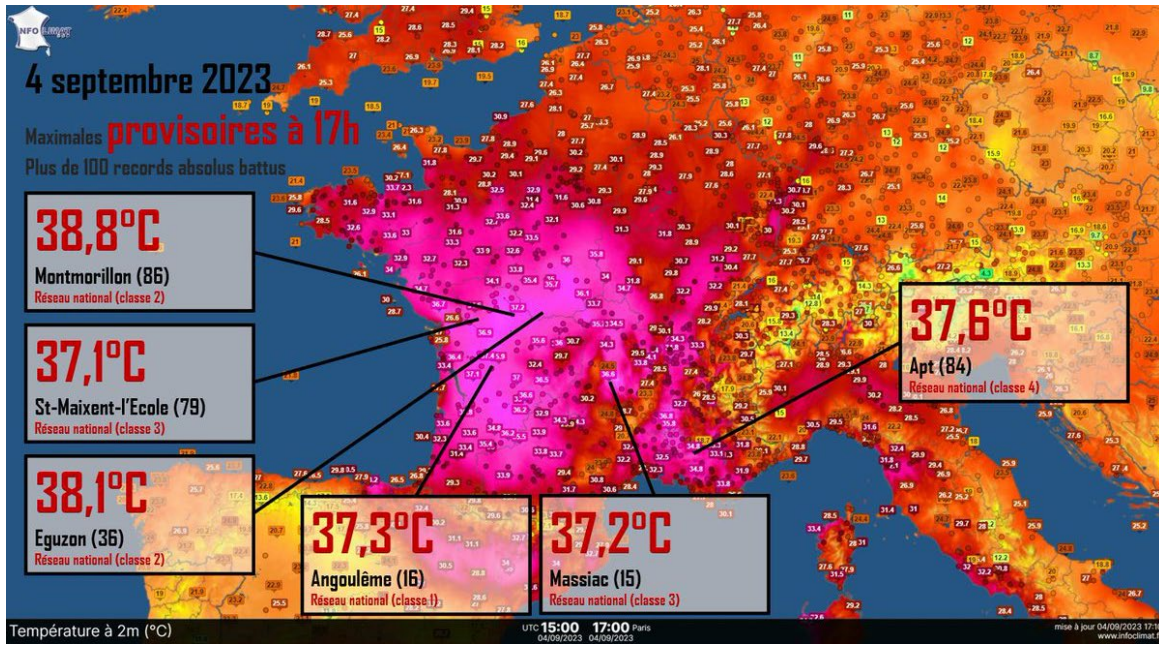
4 September 2023: “Combien de preuves faut-il encore ?

Avec un indicateur thermique national de 24.95°C, la France vit sa journée la plus chaude de septembre depuis 1947 au moins. Des centaines de records mensuels, parfois explosés de

plusieurs degrés... Franchement, ça devient dingue ! On bat les records avec une facilité déconcertante ! Le pire ? Ce devrait durer au moins une semaine !

[English translation] How much more evidence do you need?

With a national thermal indicator of 24.95°C, France is experiencing its hottest September day since at least 1947. Hundreds of monthly records, sometimes exploded by several degrees... Frankly, it's getting crazy! We break records with disconcerting ease! The worst? This should last at least a week!" —[Dr. Serge Zaka \(Dr. Zarge\)](#)



fread

function: C stdio.h library function: stands for File READ

free

function: C library function: stands for FREE memory

French Revolution

14 August 2023: “The French Revolution kicked off a storm of discussion about rights — who gets them, and what do they include — and yet even with this head start on things, French women didn't get the right to vote until *1944*.”

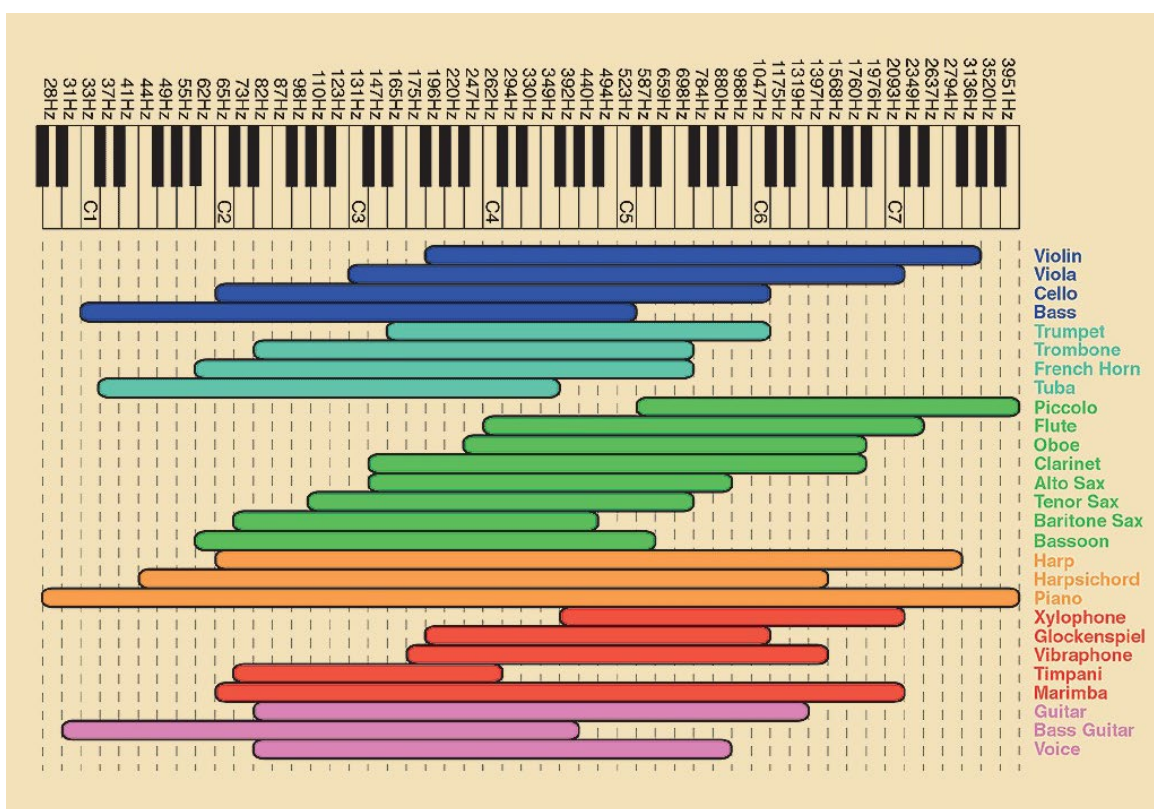
I think France doesn't get enough flak for this.” —[alicerce](#)

Fresca

Fresca was banned in the European Union and Japan because it contained Brominated Vegetable Oil (BVO), Bromine, an element used in flame retardants, can cause a number of health problems, including headaches, memory loss, impaired balance, and impaired coordination.

frequency

8 January 2024: “frequency cheat sheet” —[Solar Heavy](#)



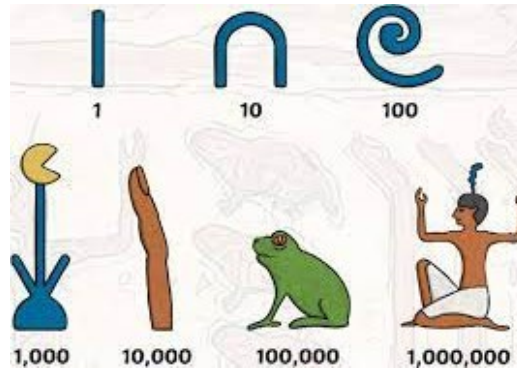
Kinky Friedman

“Money can buy you a fine dog, but only love can make him wag his tail.” —Kinky Friedman

frog

12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!”

—[Dr Campbell Price](#)



from

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

Frosted Flakes

Frosted Flakes is banned in the European Union and Japan because they include Butylated hydroxytoluene (BHT), an artificial flavor enhancer that is carcinogenic.

See: fruits

Fruit Loops

Kellogg's Fruit Loops are banned in Austria, Finland, France, and Norway because it uses dangerous food dyes such as yellow 5 and red 40, which can inhibit cell development.

All of the colors of Fruit Loops are actually the same flavor.

fscanf

function: C stdio.h library function: stands for File SCAN Function

fseek

function: C stdio.h library function: stands for File SEEK

ftell

function: C stdio.h library function: stands for File TELL position

Fuchsia

keyword: HTML color name



full

keyword: SQL reserved word (z/OS)

Fulton County Jail

25 August 2023: “Fulton County Jail ruins lives... unless you’ve got \$200K for a bond! Seven inmates have died in 2023, including a 66-year-old man held on shoplifting charges. As of September 2022, nearly half of the people detained had not been indicted. The jail was at 120% capacity in April, forcing people to sleep on the ground. 87% of the people held there are Black.” —[Olayemi Olurin](#)

fun

“Fun” is a subjective experience that refers to the enjoyment, pleasure, or amusement derived from an activity or event. It is often associated with positive emotions, such as happiness, excitement, and satisfaction. Fun can be experienced in various ways, such as through play, hobbies, social interactions, or entertainment. What is considered fun may vary from person to person, as individual preferences, interests, and cultural backgrounds play a significant role in determining what one finds enjoyable or entertaining. [ChatGPT]

the most fun activity

Some popular fun activities include:

1. Traveling and exploring new places
2. Engaging in sports or physical activities, such as hiking, swimming, or playing team sports
3. Attending concerts, festivals, or live performances
4. Pursuing hobbies like painting, cooking, or photography
5. Playing video games or board games with friends and family
6. Participating in social events and gatherings

Ultimately, the most fun activity for you will depend on your personal interests and what brings you joy and satisfaction. [ChatGPT]

the most fun game

It is difficult to determine the “most fun” game, as people have different preferences and enjoy different types of games. What is considered fun can vary greatly based on individual tastes, cultural backgrounds, and personal experiences. Some may enjoy board games, while others might prefer video games, sports, or puzzle games.

Popular games that many people find enjoyable include classics like Monopoly, Scrabble, and Chess, as well as video games like *The Legend of Zelda: Breath of the Wild*, *The Witcher 3: Wild Hunt*, and *Minecraft*. In recent years, games like *Among Us* (inspired by *Mafia*, a party-style game and the science fiction movie *The Thing*) and *Fall Guys* have gained widespread popularity for their fun, engaging, and social gameplay.

Ultimately, the most fun game for you will depend on your personal interests and preferences. It's a good idea to try different types of games to discover which ones you enjoy the most. [ChatGPT]

function

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: JavaScript reserved word

keyword: PHP reserved word

keyword: VHDL reserved key word

See: `_FUNCTION_` — PHP

Fuchsia

operating system

Proprietary OS by Google

Fuchsia is a capability-based, real-time, operating system (RTOS) scalable to universal devices, in early development, from the tiniest embedded hardware, wristwatches, tablets to the largest personal computers. Unlike Chrome OS and Android, it is not based on the Linux kernel, but instead began on a new microkernel called “Zircon”, derived from “Little Kernel”.

—[Wikipedia: List of operating systems](#)

futomomo

Futomomo (Thigh Tie): This binds the leg, turning it back on itself, making it immobile.

See also: shibari

fwrite

function: C stdio.h library function: stands for File WRITE

Gg

G

ASCII: 47 hex

UNICODE: LATIN CAPITAL LETTER G

g

ASCII: 67 hex

UNICODE: LATIN SMALL LETTER G

G7

“Chinese, Indian and Brazilian foreign policy experts have called the recent G7 summit as the most “pro-war” rabid summit they’ve seen yet. Lula expressed disappointment towards US and UK that did not let open and free dialogue of peace between himself and Modi with Zelenksyy.” —[nuno marques](#) [2023]

Gabon

29 August 2023: “Gabon Armed Forces have seized power in a coup this morning. With French support Gabon had been ruled by father and son since 1967.” —[Adémólá](#)

29 August 2023: “A military coup is ongoing in Gabon following controversial elections. The country has been ruled by a father and son since 1967.

President Ali Bongo has ruled Gabon since 2009.

His father, former President Omar Bongo ruled Gabon from 1967 to 2009.” —[Africa Facts Zone](#)

29 August 2023: “Gabon’s former President Omar Bongo had 70 bank accounts, 39 apartments, 2 Ferraris, 6 Mercedes Benz cars, 3 Porsches and a Bugatti in France.

He ruled for 42 years (from 1967 to 2009).

His son, Ali Bongo has been President since 2009.

He has just been overthrown in a coup.” —[Africa Facts Zone](#)

30 August 2023: “Gabon’s military names Gen. Brice Nguema as the Transitional Leader.

He said ousted President Bongo violated the constitution by seeking a third term.

He also said his illness was an issue that wasn’t addressed.

He is the Head of the Presidential Guard.” —[Africa Facts Zone](#)

30 August 2023: “After the coup in Gabon, revolutionaries uncovered suitcases & bags in the ousted President’s family home filled with bundles of banknotes, CFA francs, dollars and euros.??” —[Jackson Hinkle](#) [includes video]

Gaddafi (also Gadaffi)

“We joined the United Nations because we thought we were equals, only to find that one country can object to all the decisions we make. Who gave the permanent members their status in the Security Council? Four of them granted this status to themselves.

The only country that we in this Assembly elected to permanent member status in the Security Council is China. This was done democratically, but the other seats were imposed upon us undemocratically through a dictatorial procedure carried out against our will, and we should not accept it.” —**GADDAFI (2009):**

“During his first decade in office after gaining power from a bloodless coup, Colonel Muamar Gadaffi boosted Libya’s economy by an outstanding 600 percent.

He nationalized the country's oil fields becoming the first Arab head of state to actually control and supersede the profits foreign oil companies had extracted. He used the money for public works and education and redistributed wealth among the lower classes.

Libya’s gross domestic product rose from around \$3.5 billion in 1969 to over \$20 billion by 1979.” —[Typically African](#)

Gainsboro

keyword: HTML color name

Gainsboro

#DCDCDC

gallium

7 July 2023: “The US is angered by China’s restrictions on the export of chip-making raw materials.

It’s about restrictions on deliveries of germanium and gallium.

“This type of behavior is an attempt to exert pressure through the economy, it is not fair play. America has always advocated the peaceful resolution of any conflict, and the sanctions policy only shows the weakness of the Chinese government,” said the spokeswoman for the White House, Karin Jean-Pierre.

The logic is “iron-clad” - restricting chip sales to China is fine, but if the Chinese in return restrict supplies of raw materials to the Americans, it’s “unfair”. —[Markus Kraus](#)

Gal Vihara

20 December 2023: “The Gal Vihara (“Stone or Rock Temple” in Sinhalese), in Sri Lanka, known originally as the Uttararama, features four carved granite Buddha images. The temple is located in the ancient city of Polonnaruwa in North Central Province. The reclining Buddha is just over 14 m (46 ft) in length, making it one of the largest sculptures in South Asia. Polonnaruwa was Sri Lanka’s second capital and is a UNESCO World Heritage Site.” —CIA World Factbook (material that expires after 30 days)



games

most popular games

The most popular games:

1. Uno
2. Chess
3. Cribbage
4. Minecraft
5. Checkers
6. 500 Rum
7. PlayUnknown's Battlegrounds (PUBG) Battle Royale Mode
8. Monopoly
9. Solitaire
10. League of Legends
11. Scrabble
12. Poker
13. Clue/Cluedo (the US and UK versions)
14. Fortnite
15. Battleship
16. Trivial Pursuit
17. Backgammon

18. Hearts
19. Candy Land
20. Counter-Strike: Global Offensive
21. Rummikub
22. Gin Rummy
23. Life
24. Call of Duty Mobile
25. Othello
26. Pokemon
27. Pictionary
28. Blackjack
29. Apex Legends
30. Catan
31. Bridge
32. Risk
33. Grand Theft Auto V
34. Stratego
35. Palace (card game)
36. Macala
37. Clash of Clan
38. Ker-Plunk!
39. Spades
40. Connect 4
41. Candy Crush Saga
42. Blokus
43. Tetris
44. Cranium
45. Peanuts (card game)
46. Operation
47. Magic: the Gathering
48. Mouse Trap
49. Rocket League
50. Mastermind
51. Dungeons & Dragons
52. Twister
53. Among Us
54. Yahtzee
55. Dota 2
56. Chinese Checkers
57. Roblox
58. Go

Table Top Role Playing Games (TTRPGs)

Forge of Empires

Eric Garcetti

18 March 2023: “Eric Garcetti is accused of having direct knowledge of his top aid and good friend forcibly touching and kissing at least a dozen women w/out consent and doing nothing about it. So of course Joe Biden thought he’d make a great ambassador to India and of course Dems voted him in.” —[Professor Anthony Zenkus](#)

18 March 2013: “Some of the victims were LAPD in Rick Jacobs’ security detail. Allegations include Garcetti being present for some of the abusive behavior.

Joe Biden of course, doesn’t care. Neither do Dems. Because Biden and Dems don’t care about sexual assault (unless a Republican does it).” —[Professor Anthony Zenkus](#)

garlic

a strong-smelling pungent-tasting bulb, used as a flavoring in cooking and in herbal medicine

gate

gĕjt (Received Pronunciation and General American)

countable noun

1. *logic* An idealized model of computation implementing a Boolean or mathematical function.

2. *electronics* A physical electronic switch or device that allows or prevents the flow of current in a circuit when specific input conditions are met.

3. *electronics* An electrode in a semiconductor, especially a field-effect transistor, that modulates or controls the current flowing through the transistor according to the voltage applied to the electrode.

4. *electronics* A signal that makes an electronic circuit operative or inoperative either for a certain time interval or until another signal is received.

verb

1. *electronics* To control the operation of an electronic device by means of a gate.
2. *electronics* To select the parts of a wave signal that are within a certain range of amplitude, frequency, or within certain time intervals.

Claudine Gay

2 January 2024: “How sad but predictable that the same figures and forces enabling the ethnic cleansing and genocidal attacks on Palestinians in Gaza - Ackman, Blum, Summers and others - push out the first Black woman president of Harvard! This racism against both Palestinians and Black people is undeniable and despicable! I have experienced similar attacks from the same forces in academia with too many of my colleagues remaining silent! When big money dictates university policy and raw power dictates foreign policy, the moral bankruptcy of American education and democracy looms large! But we shall remain strong in our fight for Truth Justice Love! #Harvard” —[Cornel West](#)

2 January 2024: “HARVARD UNIVERSITY’S BLACK FEMALE PRESIDENT CLAUDINE GAY REPLACED WITH ZIONIST ALAN GARBER

Even education establishments are not safe from Zionist control.

This is the end of freedom of speech for students at university campuses.” —[Sulaiman Ahmed](#)

Note that Harvard’s board cleared Claudine Gay of plagiarism claims and is considering a lawsuit against those who made the claims.

Claudine Gay’s resignation speech discussed the criticisms she has faced after her testimony before the House of representatives.

2 January 2024: “This “firing” does suck, but not just as a confirmation of white elite power. It also sucks because no matter how hard she carried water for Zionism, they still got rid of her ass...that’s the message: no matter what you do, these folks ain’t here for you” —[Davarian L. Baldwin](#)

Gaziantep

Gaziantep, Turkey, is about 5,650 years old.

gear, musical



19 September 2023: “gear cheat sheet” — [Solar Heavy](#)



20 September 2023: “gear cheat sheet” — [Solar Heavy](#)

THE BEST AUDIO INTERFACES

FOR ANY BUDGET

Under \$200	Under \$300	Under \$1000
		
Audent Evo 4 Price: \$129	Focusrite Scarlett 4i4 Price: \$229	Apogee Duet Price: \$649
		
Steinberg UR22C Price: \$189	SSL 2+ audio interface Price: \$279	UAD Apollo Twin Price: \$799

21 September 2023: “gear cheat sheet” — [Solar Heavy](#)



14 October 2023: “gear cheat sheet” — [Solar Heavy](#)



generate

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

genocide

12 August 2023: “Speaking on a World Economic Forum panel, UN “Messenger of Peace”, Jane Goodall, advocates reducing the global population down to 450 million—a 95% reduction from today's population:

“We cannot hide away from human population growth. Because, you know, it underlies so many of the other problems. All these things we talk about wouldn't be a problem if there was the size of population that there was 500 years ago.” ” —[Wide Awake Media](#) [tweet includes short video clip] original video: [World Economic Forum: Securing a Sustainable Future for the Amazon | DAVOS 2020](#)

14 August 2023: “Everybody could live peacefully on this planet if the rich weren't hoarding the majority of the wealth and resources. Casually suggesting that the global population can be reduced by 95% is effectively calling for mass genocide. This is VERY alarming.” —[Ryan Knight](#)

1944: Polish-Jewish lawyer Raphael Lemkin invented the word .“genocide.”.

International Genocide Treaty

GEOS

abbreviation

operating system

Proprietary OS by Commodore International.

generic

keyword: Ada reserved key word

keyword: VHDL reserved key word

genetic fallacy

Genetic Fallacy: The genetic fallacy is the claim that, because an idea, product, or person must be wrong because of its origin. “That car can't possibly be any good! It was made in Japan!” Or, “Why should I listen to her argument? She comes from California, and we all know those people are flakes.” This type of fallacy is closely related to the fallacy of *argumentum ad hominem*.

—from Dr. L. Kip Wheeler's (Carson-Newman University) *Logical Fallacies Handlist*

See: fallacies of relevance

See: argumentum ad hominem

geranium

7 July 2023: “The US is angered by China’s restrictions on the export of chip-making raw materials.

It’s about restrictions on deliveries of germanium and gallium.

“This type of behavior is an attempt to exert pressure through the economy, it is not fair play. America has always advocated the peaceful resolution of any conflict, and the sanctions policy only shows the weakness of the Chinese government,” said the spokeswoman for the White House, Karin Jean-Pierre.

The logic is “iron-clad” - restricting chip sales to China is fine, but if the Chinese in return restrict supplies of raw materials to the Americans, it’s “unfair”.” —[Markus Kraus](#)

geriatocracy

“GERIATOCRACY — Government reserved to the elderly or very old.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

getc

function: C stdio.h library function: stands for GET Character

getchar

function: C stdio.h library function: stands for GET CHARACTER

Mahatma Ghandi

“Our ability to reach unity in diversity will be the beauty and the test of our civilization.” — Mahatma Ghandi, 1925

GhostWhite

keyword: HTML color name




Giant Meteor

26 July 2023:



—[Luis Figueroa](#)

See: [.gif](#)  — file extension

ginger

Ginger has been used for thousands of years to relieve inflammation, nausea, and digestive problems, as well as improve immunity to disease and improve blood circulation.

giving

keyword: COBOL reserved word (z/OS)

gLinux

operating system

Proprietary OS by Google

a Linux distribution that Google uses internally — [Wikipedia: List of operating systems](#)

global

keyword: COBOL reserved word (z/OS)

keyword: PHP reserved word

See: glutamic acid

See: glutamine

See: glycine

GM-NAA I/O

abbreviation

operating system

Proprietary OS by IBM

for the IBM 704 — [Wikipedia: List of operating systems](#)

GM OS

abbreviation

operating system

Proprietary OS by IBM

for the IBM 704 — [Wikipedia: List of operating systems](#)

GNO/OS

abbreviation

operating system

Proprietary OS by Apple for the Apple II family

go

keyword: COBOL reserved word (z/OS)

goback

keyword: COBOL reserved word (z/OS)

gold

4 July 2023: “France (which doesn’t have a single gold mine) ranks 4th in the world with

a reserve of 2436 tons of gold

Mali (a former French colony) has 860 goldmines and produces 50 tons of gold annually, but has a reserve of ZERO

France has the nerve to call “immigrants” thieves” — [Khaled Beydoun](#)

Gold

keyword: HTML color name



GoldenRod

keyword: HTML color name



Google

In 2021:

Google engineers: 4.4% Black, 6.4% Hispanic, 20% women

Google groundskeepers: 74% Hispanic

Google janitors: 68% Hispanic

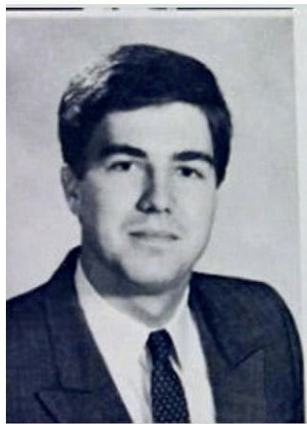
Google's sloagn: do no evil

Mikhail Gorbachev

“More socialism means more democracy, openness and collectivism in everyday life.” — Mikhail Gorbachev

Neil Gorsuch

Neil Gorsuch's 1988 Columbia College yearbook lists his major as Political Science, says he is the Editor and Founder of *The Federalist Paper* and a member of Phi Gamma Delta and quotes Henry Kissinger from 29 August 1967, “The illegal we do immediately, the unconstitutional takes a little longer.”



Neil Gorsuch Political Science

Editor, Founder, *The Federalist Paper*; Phi Gamma Delta.

The illegal we do immediately, the unconstitutional takes a little longer.

— Henry Kissinger
August 29, 1967

gote shibari

Gote Shibari (Box Tie): A popular upper-body tie that binds the arms behind the person's back. It's intricate and requires knowledge of safety practices.

See also: shibari

goto

keyword: Ada reserved key word

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

Stephen Jay Gould

“I am, somehow, less interested in the weight and convolutions of Einstein’s brain than in the near certainty that people of equal talent have lived and died in cotton fields and sweatshops.” — Stephen Jay Gould

See: .gp — file extension

See: .gp3 — file extension

See: .gp4 🖼️ — file extension

See: .gp5 🖼️ — file extension

See: .gpt — file extension

See: .gpx — file extension

Jason Graber

It is an act of totalitarianism to call for the arrest, imprisonment, torture, and/or execution of those whose beliefs you disagree with.

“Any parent who has their child have transgender surgery on them, any parent who would do that, they just need to be shot in the back of the head, they need to be convicted at trial, and immediately just be shot in the back of the head, and then we can striong them up above a bridge, so the public can see the consequences of that kind of wickedness” — [Jason Graber](#), preacher at Sure Foundation Baptist Church, a New Independent Funamentalist Baptist Church in Spokane, Washington [link includes video of him speaking]

grandfather clause

The origin of the legal concept of the grandfather clause comes from laws and constitutional amendments in Alabama, Georgia, Louisiana, North Carolina, Oklahoma, and Virginia that prevented people from voting unless their grandfather had the right to vote prior to the American Civil War or some similar date.

The only purpose of grandfather laws or clauses is to create system where rich white people have more rights than non-white and poor people.

grant

keyword: SQL reserved word (ANSI, Oracle)

Grapes of Wrath

Chapter 25 of John Steinbeck's *Grapes of Wrath*:

THE SPRING IS BEAUTIFUL in California. Valleys in which the fruit blossoms are fragrant pink and white waters in a shallow sea. Then the first tendrils of the grapes swelling from the old gnarled vines, cascade down to cover the trunks. The full green hills are round and soft as breasts. And on the level vegetable lands are the mile-long rows of pale green lettuce and the spindly little cauliflowers, the gray-green unearthly artichoke plants

And then the leaves break out on the trees, and the petals drop from the fruit trees and carpet the earth with pink and white. The centers of the blossoms swell and grow and color: cherries and apples, peaches and pears, figs which close the flower in the fruit. All California quickens with produce, and the fruit grows heavy, and the limbs bend gradually under the fruit so that little crutches must be placed under them to support the weight.

Behind the fruitfulness are men of understanding and knowledge, and skill, men who experiment with seed, endlessly developing the techniques for greater crops of plants whose roots will resist the million enemies of the earth: the molds, the insects, the rusts, the blights. These men work carefully and endlessly to perfect the seed, the roots. And there are the men of chemistry who spray the trees against pests, who sulphur the grapes, who cut out disease and rots, mildews and sicknesses. Doctors of preventive medicine, men at the borders who look for fruit flies, for Japanese beetle, men who quarantine the sick trees and root them out and burn them, men of knowledge. The men who graft the young trees, the little vines, are the cleverest of all, for theirs is a surgeon's job, as tender and delicate; and these men must have surgeons' hands and surgeons' hearts to slit the bark, to place the grafts, to bind the wounds and cover them from

the air. These are great men.

Along the rows, the cultivators move, tearing the spring grass and turning it under to make a fertile earth, breaking the ground to hold the water up near the surface, ridging the ground in little pools for the irrigation, destroying the weed roots that may drink the water away from the trees.

And all the time the fruit swells and the flowers break out in long clusters on the vines. And in the growing year the warmth grows and the leaves turn dark green. The prunes lengthen like little green bird's eggs, and the limbs sag down against the crutches under the weight. And the hard little pears take shape, and the beginning of the fuzz comes out on the peaches. Grape blossoms shed their tiny petals and the hard little beads become green buttons, and the buttons grow heavy. The men who work in the fields, the owners of the little orchards, watch and calculate. The year is heavy with produce. And the men are proud, for of their knowledge they can make the year heavy. They have transformed the world with their knowledge. The short, lean wheat has been made big and productive. Little sour apples have grown large and sweet, and that old grape that grew among the trees and fed the birds its tiny fruit has mothered a thousand varieties, red and black, green and pale pink, purple and yellow; and each variety with its own flavor. The men who work in the experimental farms have made new fruits: nectarines and forty kinds of plums, walnuts with paper shells. And always they work, selecting, grafting, changing, driving themselves, driving the earth to produce.

And first the cherries ripen. Cent and a half a pound. Hell, we can't pick 'em for that. Black cherries and red cherries, full and sweet, and the birds eat half of each cherry and the yellowjackets buzz into the holes the birds made. And on the ground the seeds drop and dry with black shreds hanging from them.

The purple prunes soften and sweeten. My God, we can't pick them and dry and sulphur them. We can't pay wages, no matter what wages. And the purple prunes carpet the ground. And first the skins wrinkle a little and swarms of flies come to feast, and the valley is filled with the odor of sweet decay. The meat turns dark and the crop shrivels on the ground.

And the pears grow yellow and soft. Five dollars a ton. Five dollars for forty fifty-pound boxes; trees pruned and sprayed, orchards cultivated—pick the fruit, put it in boxes, load the trucks, deliver the fruit to the cannery—forty boxes for five dollars. We can't do it. And the yellow fruit falls heavily to the ground and splashes on the ground. The yellowjackets dig into the soft meat, and there is a smell of ferment and rot.

Then the grapes—we can't make good wine. People can't buy good wine. Rip the grapes from the vines, good grapes, rotten grapes, wasp-stung grapes. Press stems, press dirt and rot.

But there's mildew and formic acid in the vats.

Add sulphur and tannic acid.

The smell from the ferment is not the rich odor of wine, but the smell of decay and chemicals.

Oh, well. It has alcohol in it, anyway. They can get drunk.

The little farmers watched debt creep up on them like the tide. They sprayed the trees and sold no crop, they pruned and grafted and could not pick the crop. And the men of knowledge have worked, have considered, and the fruit is rotting on the ground, and the decaying mash in the wine vat is poisoning the air. And taste the wine—no grape flavor at all, just sulphur and tannic acid and alcohol.

This little orchard will be a part of a great holding next year, for the debt will have choked the

owner.

This vineyard will belong to the bank. Only the great owners can survive, for they own the canneries, too. And four pears peeled and cut in half, cooked and canned, still cost fifteen cents. And the canned pears do not spoil. They will last for years.

The decay spreads over the State, and the sweet smell is a great sorrow on the land. Men who can graft the trees and make the seed fertile and big can find no way to let the hungry people eat their produce. Men who have created new fruits in the world cannot create a system whereby their fruits may be eaten. And the failure hangs over the State like a great sorrow.

The works of the roots of the vines, of the trees, must be destroyed to keep up the price, and this is the saddest, bitterest thing of all. Carloads of oranges dumped on the ground. The people came for miles to take the fruit, but this could not be. How would they buy oranges at twenty cents a dozen if they could drive out and pick them up? And men with hoses squirt kerosene on the oranges, and they are angry at the crime, angry at the people who have come to take the fruit. A million people hungry, needing the fruit—and kerosene sprayed over the golden mountains.

And the smell of rot fills the country.

Burn coffee for fuel in the ships. Burn corn to keep warm, it makes a hot fire. Dump potatoes in the rivers and place guards along the banks to keep the hungry people from fishing them out. Slaughter the pigs and bury them, and let the putrescence drip down into the earth.

There is a crime here that goes beyond denunciation. There is a sorrow here that weeping cannot symbolize. There is a failure here that topples all our success. The fertile earth, the straight tree rows, the sturdy trunks, and the ripe fruit. And children dying of pellagra must die because a profit cannot be taken from an orange. And coroners must fill in the certificate—died of malnutrition—because the food must rot, must be forced to rot.

The people come with nets to fish for potatoes in the river, and the guards hold them back; they come in rattling cars to get the dumped oranges, but the kerosene is sprayed. And they stand still and watch the potatoes float by, listen to the screaming pigs being killed in a ditch and covered with quick-lime, watch the mountains of oranges slop down to a putrefying ooze; and in the eyes of the people there is the failure; and in the eyes of the hungry there is a growing wrath. In the souls of the people the grapes of wrath are filling and growing heavy, growing heavy for the vintage.

Gray

keyword: HTML color name



great bodily injury

noun “Significant or substantial physical injury” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Great Buddha Dordenma

12 January 2024: “The Great Buddha Dordenma is located in Thimphu, Bhutan’s capital and largest city. The statue celebrates the 60th birthday of Bhutan’s fourth king, Jigme Singye Wangchuck. Construction on the 52 m (170 ft) tall steel statue began in 2006 and it was completed in 2015. The Buddha Dordenma is one of the largest Buddha statues in the world.” — CIA World Factbook (material that expires after 30 days)



greateeq

keyword: SQL reserved word (z/OS)

greater

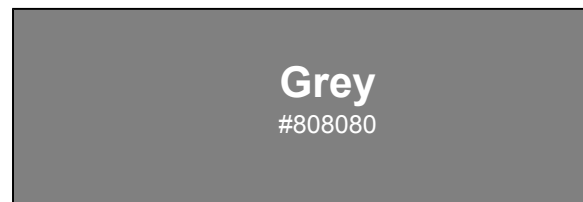
keyword: COBOL reserved word (z/OS)

Greek yogurt

Greek yogurt is very high in protein per calorie.

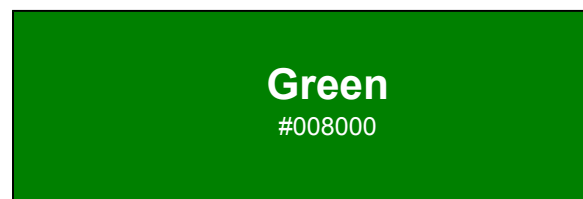
Grey

keyword: HTML color name



Green

keyword: HTML color name



Green Party

7 July 2022: The North Carolina Board of Elections voted on straight party lines (Democrats winning) to forbid certification of the Green Party for the ballot.

19 August 2023: “We are currently working on #Green Party ballot access for #2024Elections and need your help.

Most Americans don't realize the tremendous hurdles to get on every state's ballot.

If you would like to help us reach out through educational social media posts, please let me know" —[Stephanie Voltolin](#); [interactive map of where help is needed](#)

24 August 2023: "The Green Mountain Peace & Justice Party will hold town meetings between Sept 10-30th.

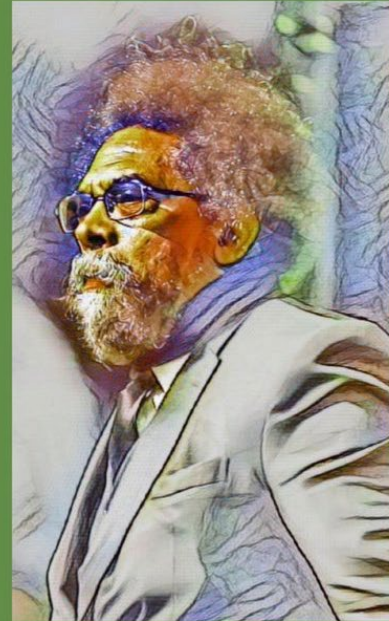
If at least 3 people attend 10 different meetings during this period, you will have ballot access for 2024.

Contact: Jess Diamondstone vtpeaceandjustice@proton.me" —Green Party Ballot Access

To get Cornel West on your ballot in Vermont:

- 3 Different people attending
- 10 Different town meetings
- 30 Minimum people needed

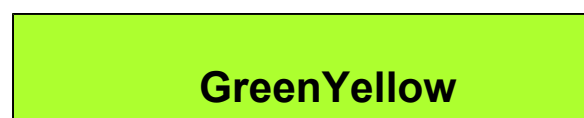
**Green Mountain Peace
& Justice Party**





GreenYellow

keyword: HTML color name



#ADFF2F

Michael Griffin

“If we had done all this, we would be on Mars today, not writing about it as a subject for “the next 50 years.” We would have decades of experience operating long-duration space systems in Earth orbit, and similar decades of experience in exploring and learning to utilize the Moon.” — Michael D. Griffin, Administrator of NASA 2004-2009

Noah Grigni

“Imagine what Atlanta would look like if you invested in communities, instead of in repression. Atlanta needs affordable food and housing, accessible infrastructure, social services, green space, not Cop City. ... We don't need a school for assassins.” —Noah Grigni

groove

14 December 2023: “What is groove?

· +1 killer mixing tip for better groove

In music, “groove” refers to the rhythmic feel or pattern created by the interplay of various musical elements, such as timing, dynamics, and accents.

Rhythmic feel is not the same as rhythm. In two different beats, rhythm can be the same, but the accents and sounds can vary. As well as interaction between sounds. This will create a different rhythmic feel, or a different groove.

To create a groove, focus on a solid rhythmic foundation, experiment with dynamics, and pay attention to the interaction between different instruments.

It often involves finding the right balance between repetition and variation to make the music rhythmically engaging.

When you shift your sounds from the grid, it also can help the groove. Because again, rhythmic feel changes, it starts to be alive and unique. Rhythm should engage with the listener.

It also possible to create a certain groove with vocals. When you set the tone by singing or rapping. It is common. Vocals also can interact with instruments to create a certain rhythmic feel.

Many random songs that blew up just have a great groove. And there is no hit song that is not rhythmically great.

And most of the average songs sound boring and not engaging. Rhythm is there, but there is no unique and engaging rhythmic feel.

ÑÑÑÑÑÑ-

One mixing tip how you can create or emphasize the groove in your song:

You can try matching the compressors release time to song bpm

This will make your compressor “dance” in rhythm, and the sound you processed will start “breathing” with a song, coming to life.” —[Nathaniel W.](#)

gross negligence

noun “Any negligent acts which are aggravated, reckless or flagrant, and a departure from the conduct of a careful person under the same circumstances” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

ground beef

U.S. prepackaged ground beef is banned in the European Union because it is made with pink slime. Pink slime is prepared with ammonia gas, which is dangerous for human consumption.

See: ground vegetables

group

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

group_by

keyword: SQL reserved word (z/OS)

GS/OS

abbreviation

operating system

Proprietary OS by Apple for the Apple II family

Guam

11 January 2023: “In Guam, the U.S. military wants to burn/detonate up to 35,000 pounds of its leftover munitions each year on ancestral lands that it seized after WWII. With the help of Earthjustice, a group called “Prutehi Litekian: Save Ritidian” is fighting back. Activist Monaeka Flores talks about fighting to stop the Air Force from blowing up leftover munitions on Guam’s beaches.” —[Earthjustice](#)

11 August 2023: “What is clear is that the U.S. military’s plans for significantly expanding air and missile defenses on Guam are continuing to solidify and, if they proceed as planned, look set to bring significant changes to Guam.” —[Pacific Center for Island Security](#) in response to “Guam’s Airspace Set To Be Most Defended On Earth In New Plans, Sites all over the island and permanent airspace closures will be part of turning Guam into a fortress unlike any other.” —[the Drive](#).

Guantanamo Bay

The United States kidnaps and imprisons people in Guantanamo Bay to deny them basic legal rights, which are guaranteed to every person inside the US. —[William Murphy](#)

guarded

keyword: VHDL reserved key word

Guatemala

nation

Invaded by the United States 1966.

26 July 2023: “In 1954 while the CIA was engineering the banana coup, Guatemala’s government announced it had learned of the plot. Coup headquarters in FL sent a telegram to CIA’s station in Guatemala w/ advice on suppressing the info; one strategy was to seed flying saucer stories in the press ” —[12 Ball](#)

1. Following is KUGOWN guidance for immediate use amplifying ref in connection with WSBURNT govt White Paper.³
2. Ridicule:
 - A. Link White Paper to WSBURNT October fair fiasco. Now we have January Fair. October, bulls didn’t show up. Where is the January bull, this American colonel? He hasn’t shown up either. That makes it easy for the govt toreadors. In October, tickets were all fouled up. Could it be the same with photo-stated “tickets” attached to White Paper? Anyway, always some excitement in WSBURNT.
 - B. WSBURNT people being victimized by too much propaganda. Plot exposé too stereotyped, with familiar U.S. United Fruit Co., Nicaraguan scapegoats. WSBURNT govt cries wolf too often.⁴
 - C. Paper just sign same fear, panic in WSBURNT govt and Red ranks that led to recent arrests.
3. De-emphasis:
 - A. Attempt obtain bigger play for recent stories of WSBURNT refugees than for paper.
 - B. Paper must be read in light recent WSBURNT razzle dazzle preceding OAS. New Foreign Minister named; PRG party suggests hauling Arevalo out of ashcan to make dramatic stand of OAS; *Pravda* lends big hand; Toledano drums up followers against “intervention” from hemisphere Reds; WSBURNT makes arrests. Whole orchestra playing and now White Paper supposed to be cymbal crash. Only, cymbal is cracked.
 - C. If possible, fabricate big human interest story, like flying saucers, birth sextuplets in remote area to take play away.

8 December 2023: Guatamela’s top prosecutor’s office declared the results of the landslide election 61% victory from last August as void. It is not a legally binding declaration, but it is the latest attempt to stop Bernardo Arévalo from taking office as president on 14 January 2024. The

attorney general's office is trying to suspend Arévalo's political party for being improperly registered and declare the election results void.

The Organization of American States has condemned the action, calling it a "coup attempt" "typical of dictatorships and not democracies."

Attorney General María Consuelo Porras has been indicted by the US since 2021 on the list of corrupt actors.

Che Guevara

"Above all, always be capable of feeling deeply any injustice committed against anyone, anywhere in the world. This is the most beautiful quality in a revolutionary." —Che Guevara, last words in his farewell letter to his children

"Above all, always be capable of feeling deeply any injustice committed against anyone, anywhere in the world. This is the most beautiful quality in a revolutionary."

— Che Guevara's last words to his children in a farewell letter



guided missiles



“We have guided missiles and misguided men.” —Martin Luther King, Jr.

Guinea

30 August 2023: “France took the lives of 1million Algerians during their struggle for independence, in fact, French people were burning everything in Guinea immediately Guineans voted for independence in 1958. There’s no where in Africa that France has taken democracy to.” —[Adémólá](#)

guinea pig

Because the guinea pig is a social animal, Switzerland considers owning just one guinea pig to be animal abuse.

guitar

Q: What do call a guitar player without a girlfriend?

A: Homeless.

Q: How do you get a guitarist to play softer?

A: Place sheet music in front of him.

23 January 2024: “Pro tip: Recording guitar in front of live studio-monitors can create feedback—the same way feedback is created when bringing guitar pickups close to a traditional speaker cabinet. However subtle, this could be the source of those “problematic frequencies” you keep notching out.” —[Eduard](#)

Gulf Stream

25 July 2023: “If the gulf stream collapses the likelihood of a deep freeze in the northern hemisphere that could devastate arable land is almost assured. That flow of warm water from the equator is vital to our ability to grow crops.” —[The_Pale_H0rse2](#)

25 July 2023: “The Gulf Stream system could collapse as soon as 2025, a new study suggests. The shutting down of the vital ocean currents, called the Atlantic Meridional Overturning Circulation (AMOC) by scientists, would bring catastrophic climate impacts.

AMOC was already known to be at its weakest in 1,600 years owing to global heating and researchers spotted warning signs of a tipping point in 2021.

The new analysis estimates a timescale for the collapse of between 2025 and 2095, with a central estimate of 2050, if global carbon emissions are not reduced.” —[Geoff McFarlan](#)

gun control

“To buy a gun in Japan requires taking an all-day safety class, an interview with the police about why you need a gun, a psych evaluation 3 different permits, and a background check that includes interviews of family and neighbors. With 127 million people, it sees barely 10 gun deaths a yer, the lowest gun death rate in the world.” —[Dark Warlord](#)

Joe Gunderson

Joe Gunderson and I rode on the same school bus to high school. He and one other student (whose name I unfortunately forget) would have long conversations, mostly about social justice, on the way to and from school. He had two younger sisters (Cindy and Lynn).

Gary Gyga

“The worthy GM never purposely kills players’ PCs. He presents opportunities for the rash and unthinking players to do that all on their own.” —Gary Gyga

gynarchy

“GYNARCHY — Government reserved to females only.” —Gary Gyga, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

Hh

H

ASCII: 48 hex

UNICODE: LATIN CAPITAL LETTER H

h

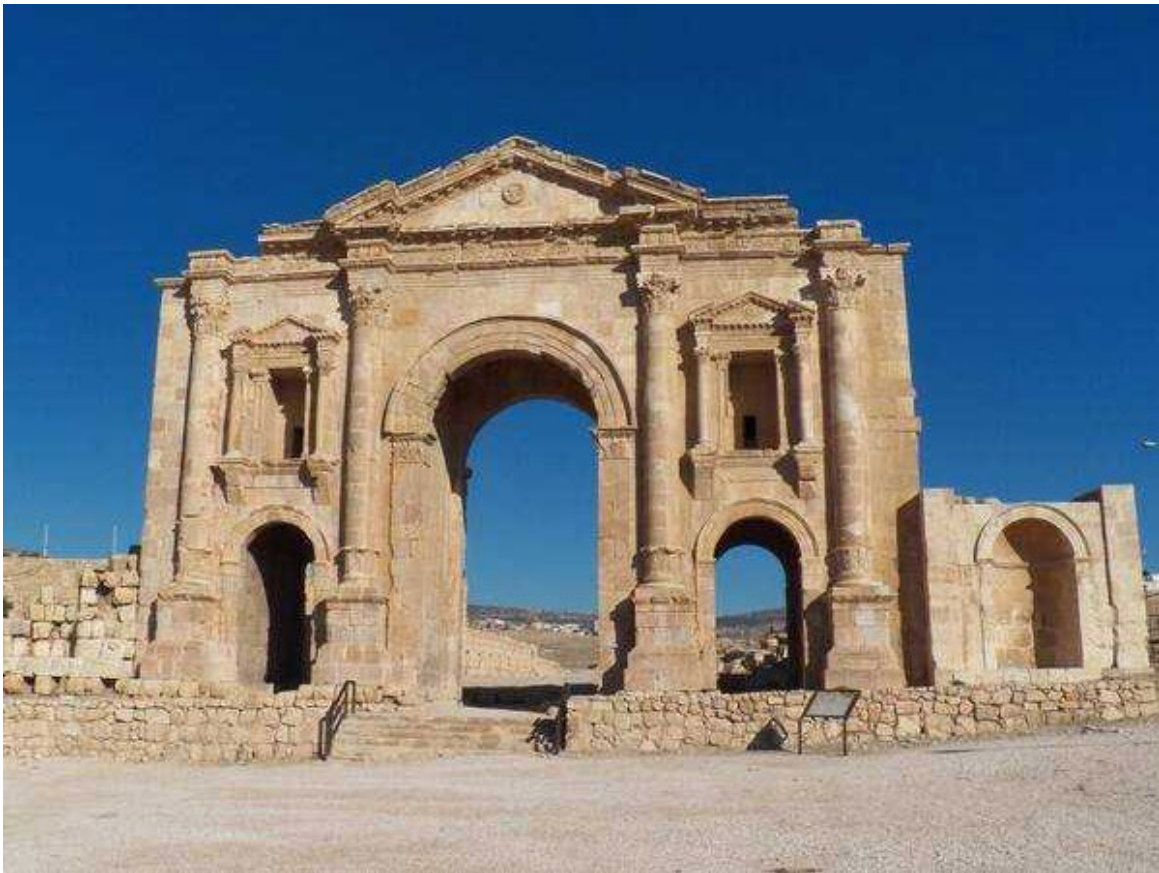
ASCII: 68 hex

UNICODE: LATIN SMALL LETTER H

See: **.h264**  — file extension

Arch of Hadrian

10 January 2024: “In Jordan, the Arch of Hadrian was built to honor the visit of Roman Emperor Hadrian to Jerash (then called Gerasa) in the winter of A.D. 129-130. The arch is 11 m high (36 ft), 37.45 m long (122 ft), and 9.25 m wide (30 ft wide). To the left and behind the arch is the Hippodrome, where chariot races were held.” —CIA World Factbook (material that expires after 30 days)



haggis

Haggis is a Scottish dish consisting of a sheep's or calf's offal mixed with suet, oatmeal, and seasoning and boiled in a bag, traditionally one made from the animal's stomach.

Haiti

29 July 2023: "In 2009 Haiti's gov raised the min hourly wage from 27 cents to 67 cents, until Hillary Clinton's State Dept intervened and told Haiti to block the measure because US corporations didnt like it. Now Haiti is a lawless nation ravaged by guns and poverty. Democrats are frauds." —[Professor Anthony Zenkus](#)

30 July 2023: "Hillary Clinton's State Department, under Obama, was instrumental in pushing Haiti into a descent of poverty and lawlessness, becoming a nation ruled by gangs and violence. The invasion of Haiti was supposed to happen in her second term, but it's happening in Biden's first.

The the invasion and ensuing occupation will be done under the guise of restoring order and protecting human rights - but it's real purpose is the subjugation and exploitation of the workers

of Haiti by U.S. corporations and establishment “non profits”.

If you didn't know already: we are invading Haiti. Soon. We will be choosing another nation to “lead” the occupation force, but it is U.S. sponsored all the way.

And if you want to know how the exploitation is going to play out, just look at what the Clintons did in Haiti after the earthquake (links for all points below).

So much for the “rules-based order”.

[BBC](#): US election 2016: What really happened with the Clintons in Haiti. Haitian activists accuse the Clintons of enriching themselves through their foundation's work on the Caribbean Island.

[The Nation](#): WikiLeaks Haiti: Let them live on \$3 a day. The US Embassy aided Levi's, Hanes contractors in their fight against an increase in Haiti's minimum wage.

[Reuters](#): Kenya ready to lead multinational force in Haiti, which is experiencing a surge in violence between police and gangs, its foreign minister said on Saturday [29 July 2023]

One additional point: U.S. treatment of Haitian asylum seekers has been horrendous under Biden. His policies have been so racist and inhumane that his own Special Envoy to Haiti resigned in protest.

[New York Times](#): A senior U.S. diplomat to Haiti resigns, citing Biden administration policy. The diplomat, Daniel Foote, was appointed special envoy to Haiti in July, just weeks after President Jovenel Moïse was assassinated.” —[Professor Anthony Zenkus](#)

15 August 2023: “The Red Cross raised \$500 million for Haiti earthquake relief in 2010, spent 25% on internal administrative costs, built about 6 houses for Haitians and refuses to say what it did with the rest of the money. And Michelle Obama helped lead their fundraising drive.” —[Max Blumenthal](#)

See: `__halt_compiler__` — PHP

Hamas

13 October 2023: “HAMAS formed in 1987, 4 decades after this photo was taken.” —[Stephanie Voltolin](#)



Palestinians fleeing for their lives from Israeli soldiers and settlers, 1948

Fred Hampton

“You can jail a revolutionary, but you can’t jail the revolution.” —Fred Hampton

“We don’t think you fight fire with fire best; we think you fight fire with water best. We’re going to fight racism not with racism, but we’re going to fight with solidarity. We say we’re not going to fight capitalism with black capitalism, but we’re going to fight it with socialism. We’re stood up and said we’re not going to fight reactionary pigs and reactionary state’s attorneys like this and reactionary state’s attorneys like Hanrahan with any other reactions on our part. We’re going to fight their reactions with all of us people getting together and having an international proletarian revolution.” —Fred Hampton

Hapi

Hapi was both the Nile River and the deity of the Nile River.

hard water

In scientific terms, water hardness is generally the amount of dissolved calcium and magnesium in water. But in layman's terms, you may notice water hardness when your hands still feel slimy after washing with soap and water, or when your drinking glasses at home become less than crystal clear. —[U.S. Geological Survey](#)

The simple definition of water hardness is the amount of dissolved calcium and magnesium in the water. Hard water is high in dissolved minerals, largely calcium and magnesium. You may have felt the effects of hard water, literally, the last time you washed your hands. Depending on the hardness of your water, after using soap to wash you may have felt like there was a film of residue left on your hands. In hard water, soap reacts with the calcium (which is relatively high in hard water) to form “soap scum”. When using hard water, more soap or detergent is needed to get things clean, be it your hands, hair, or your laundry. —[U.S. Geological Survey](#)

Have you done a load of dishes in the dishwasher, taken out the glasses, and noticed spots or film on them? This is more hard-water residue—not dangerous, but unsightly. Many industrial and domestic water users are concerned about the hardness of their water. When hard water is heated, such as in a home water heater, solid deposits of calcium carbonate can form. This scale can reduce the life of equipment, raise the costs of heating the water, lower the efficiency of electric water heaters, and clog pipes. And, yes, mineral buildup will occur in your home coffee maker too, which is why some people occasionally run vinegar (an acid) through the pot. The acidity of vinegar helps to dissolve mineral particles by making them charged. These newly charged particles become attracted to the positive and negative charges in water and can be washed away easily. —[U.S. Geological Survey](#)

But hard water can have some benefits, too. Humans need minerals to stay healthy, and the World Health Organization (WHO) states that drinking-water may be a contributor of calcium and magnesium in the diet and could be important for those who are marginal for calcium and magnesium intake. —[U.S. Geological Survey](#)

Harmony OS

operating system

Proprietary OS by Huawei

harpsichord

What's the slang term for a harpsichord?
A Baroque man's piano.

Harris UNIX

operating system

Proprietary OS by Harris Corporation

Proprietary UNIX based OS for Harris' Computers (MCX)

Harvard University

2 January 2024: "HARVARD UNIVERSITY'S BLACK FEMALE PRESIDENT
CLAUDINE GAY REPLACED WITH ZIONIST ALAN GARBER

Even education establishments are not safe from Zionist control.

This is the end of freedom of speech for students at university campuses." — [Sulaiman Ahmed](#)

Note that Harvard's board cleared Claudine Gay of plagiarism claims and is considering a lawsuit against those who made the claims.

Claudine Gay's resignation speech discussed the criticisms she has faced after her testimony before the House of representatives.

hash

keyword: SQL reserved word (z/OS)

hasOwnProperty

keyword: JavaScript method

have

part of speech: verb

Oxford English Corpus (OEC) rank: #9

Corpus of Contemporary American English (COCA): #8

Dolch level: Primer

Polysemy: 25

having

keyword: SQL reserved word (ANSI, Oracle, z/OS)

Hawai‘i

“We are not American. We will die as Hawai‘ians. We will never be Americans...They took our land. They imprisoned our queen. They banned our language. They forcibly made us a colony of the United States.” —Haunani Kay Trask speech, Jan 17, 1993

15 Aug 2023: “Hawaii governor says state is looking to ‘acquire land’ that was destroyed in fires

On Monday [13 August 2023], Hawaiian governor Josh Green announced that his administration was considering acquiring properties in the seaside resort town of Lahaina that had been destroyed by the recent wildfires.

“I’m already thinking of ways for the state to acquire that land so that we can put it into workforce housing, to put it back into families, or make it open spaces in perpetuity as a memorial to the people who were lost,” Green said while standing amongst the rubble.

“We want this to be something we remember after the pain passes as a magic place. Lahaina will rebuild. The tragedy right now is the loss of life. The buildings can be rebuilt over time, even the banyan tree may survive, but we don’t want this to become a clear space where then people from overseas just come and decide they’re gonna take it. The state will take it and preserve it first.” ” —[PM](#)

17 August 2023: “Maui is Joe Biden’s “Katrina moment”.

The Biden administration is telling people they need to call or go online to fill out forms if they need help from FEMA.

There’s no power or cell service & people have very limited movement due to restrictions” —[LeftwardSwing](#)

Hawaiian papaya

The European Union bans Hawaiian papaya because it was genetically modified in the 1990s to resist ringspot virus.

HDOS

abbreviation

operating system

Proprietary OS by Heathkit and Zenith Data Systems

ran on the H8 and Heath/Zenith Z-89 series — [Wikipedia: List of operating systems](#)

heading

keyword: COBOL reserved word (z/OS)

headphones

Wearing headphones for an hour can increase the amount of bacteria in your ears by 700 times.

22 September 2023: “headphone cheat sheet” — [Solar Heavy](#)



headroom

26 August 2023: “headroom cheat sheet” — [Solar Heavy](#)

HEADROOM TIPS

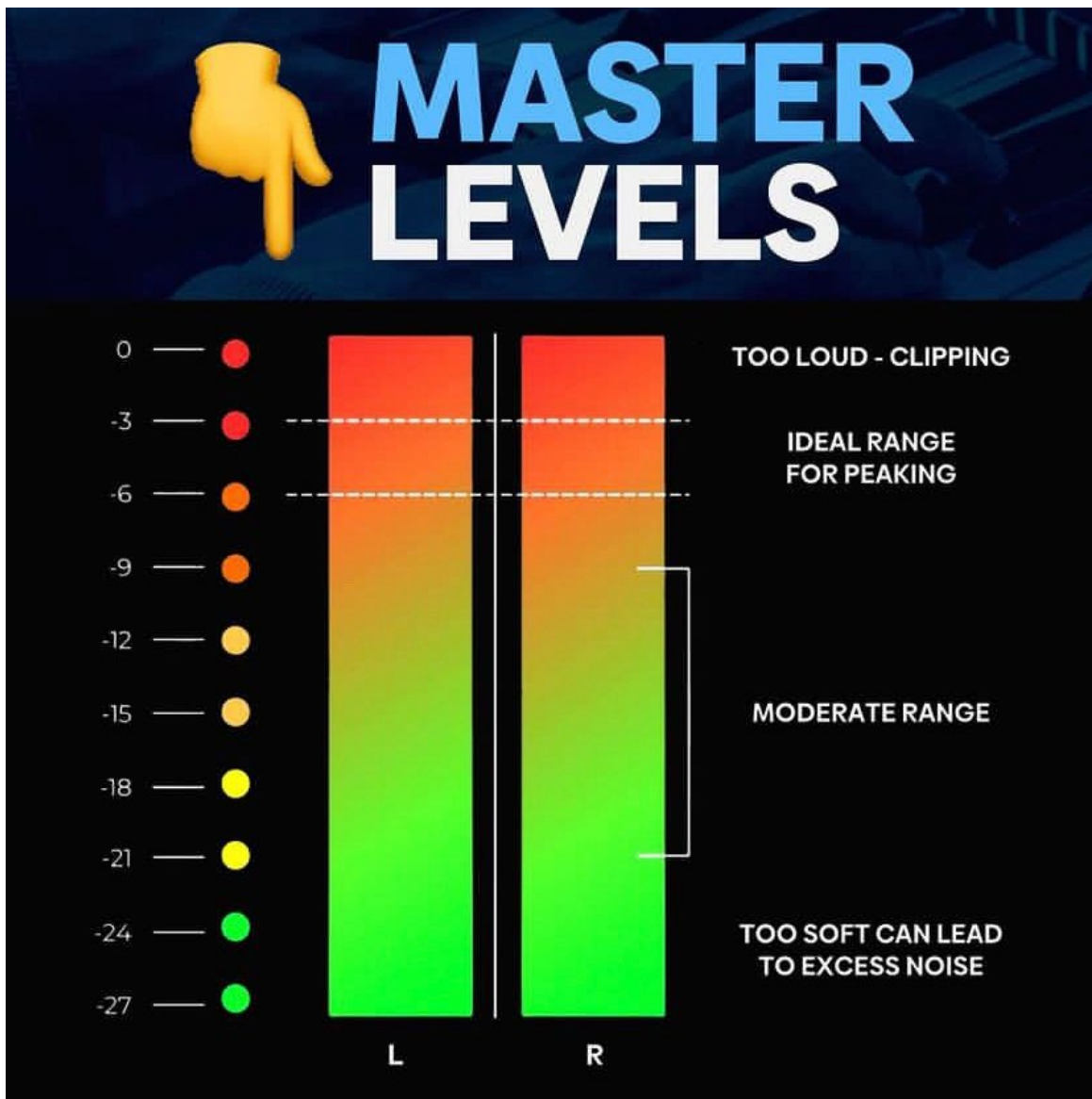
ONE OF THE MOST ESSENTIAL TECHNIQUES FOR ACHIEVING A PROFESSIONAL MIX IS LEAVING ENOUGH HEADROOM. ONCE YOU BEGIN MIXING THE SONG, REDUCE THE VOLUME ON ALL OF THE CHANNELS BY BRINGING THE FADERS DOWN BY -10 TO -12DBs.



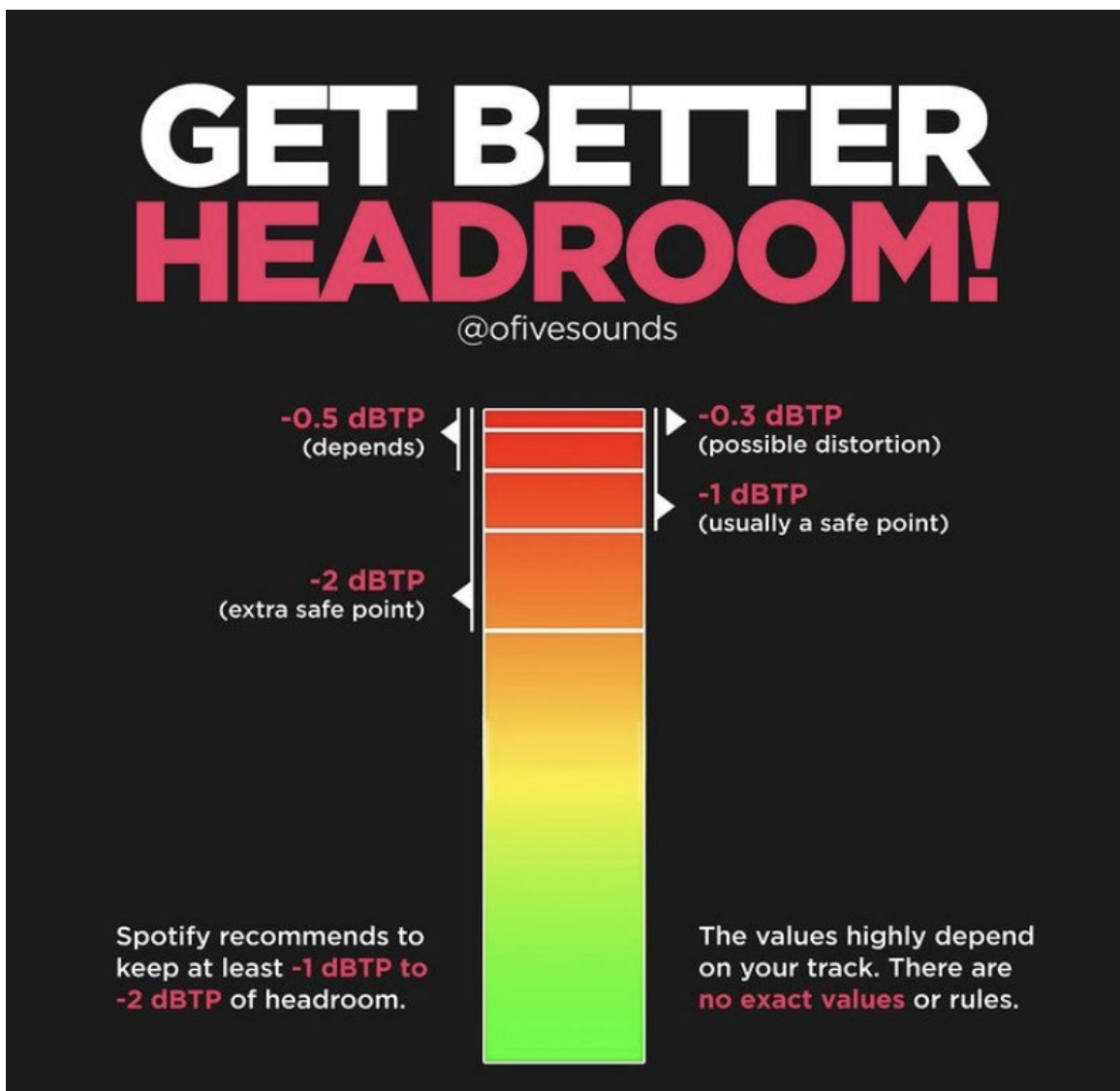
THIS WILL ALLOW YOU TO PUSH THE VOLUME OF THE MAIN INSTRUMENTS WITHOUT HAVING TO WORRY ABOUT DIGITAL CLIPPING.

REMEMBER, HEADROOM IS ONE OF THE MOST IMPORTANT ASPECTS OF EVERY PROFESSIONAL MIXDOWN.

31 August 2023: “headroom cheat sheet” — [Solar Heavy](#)



11 September 2023: “headroom cheat sheet” — [Solar Heavy](#)



19 December 2023: “headphone cheat sheet” — [Solar Heavy](#)

HEADPHONES OPEN VS CLOSED



OPEN

- LESS EAR FATIGUE
- MORE SONIC SOUNDSTAGE
- LESS ISOLATION FROM OUTSIDE NOISE
- SOUND LEAKS OUTSIDES

Good for mixing



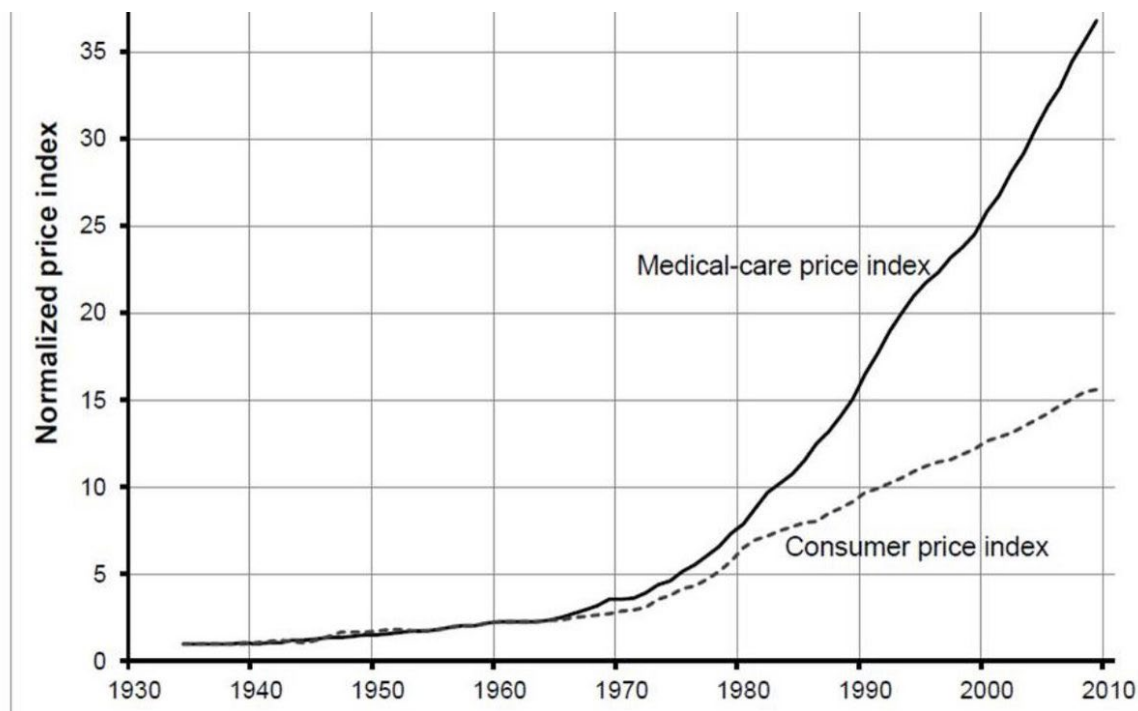
CLOSED

- EAR TIRES QUICKLY
- LESS LEAKAGE OF SOUND.
- MORE ISOLATION FROM OUTSIDE NOISE
- LESS FRAGILE TO MOISTURE

Good for recording

health care

“Prior to 1973 it was illegal to profit off of healthcare.” — [Dark Warlord](#)



Obama received \$19 million in campaign bribes from the healthcare industry in 2012.

Romney received \$19 million in campaign bribes from the healthcare industry in 2012.

Trump received 21 million in campaign bribes from the healthcare industry in 2020.

Obama received 41 million in campaign bribes from the healthcare industry in 2020.

27 May 2023: “In the middle of a global pandemic, President Biden received more than \$40 million USD from healthcare lobbyists in 2021.” —[Stephanie Voltolin](#), quoting [the Healing US \(2023\) Movie trailer](#).

13 December 2023: “40% of Americans have delayed or skipped needed health care in the past year because they couldn’t afford it, per Bloomberg.” —[unusual whales](#)

My note: The Democrats are trying to convince me that this problem doesn’t exist and that the suffering of workers is a just a myth in the midst of a great economy while the Republicans are trying to convince me that this is all Biden’s fault for bewing a Communist Socialist (Biden is neither) and that deregulating for profit healthcare will somehow fix everything.

hearing protection

20 March 2023: “wear earplugs to shows” —[Ooga](#)

4 July 2023: “Pro tip: Most teenagers technically have superior hearing when measured against older pros, but even the healthiest of ears can be deaf with inexperience. We are all damned to lose some hearing as we age—but that doesn’t have to be tonight! PROTECT THE

EARS!!!” —[Ed the Soundman](#)

health insurance

30 July 2023: “Reminder: The ONLY way an insurance company makes a profit is by taking in MORE in premiums and deductibles from paying members than it pays out in claim benefits.

Health insurance is a middleman scam that restricts access to vital healthcare for those who need it most.” —[Johnny Akzam](#)

FORBES > INNOVATION > HEALTHCARE

UnitedHealth Group Reports \$4.7 Billion Profit As Optum And Health Plans Maintain Momentum

Bruce Japsen

Senior Contributor ⓘ

*I write about healthcare
business and policy*

Follow



0

Jan 13, 2023, 08:58am EST

HeartOS

operating system

Proprietary OS by DDC-I, Inc.

POSIX-based Hard Real-Time Operating System. — [Wikipedia: List of operating systems](#)

Chris Hedges

“The citizen has become irrelevant. He or she can participate in heavily choreographed elections, but the demands of corporations and banks are paramount.” —Chris Hedges

“The brilliance of Bill Clinton was that he transformed the Democratic Party into the Republican Party, and he pushed the Republican Party so far to the right it became insane.” —Chris Hedges

See: `.heic` — file extension

Heienberg Uncertainty Principle

“Heisenberg Uncertainty Principle: This equation sets a lower bound on the product of the standard deviations of the position (x) and momentum (p) of a particle. It states that there is a limit to the precision with which pairs of properties can be known simultaneously. The reduced Planck constant (\hbar) divided by 2 is the smallest possible value of this product.” — [Science Simplified](#)

Hekla Volcano

1 January 2024: “A rainbow envelopes the peak of Hekla volcano, a stratovolcano located in southern Iceland. It is one of the island’s most active volcanoes, having erupted more than 20 times since the ninth century A.D. Hekla is 1,491 m (4,892 ft) high and its name is Icelandic for “short hooded cloak,” which probably refers to the clouds that frequently hang over its summit. However, in the Middle Ages, the Norse called it the “Gateway to Hell.” The volcano is responsible for the creation of more than 10% of the landmass of Iceland over the last 1000 years. Iceland is situated on top of a seismic hotspot, subjecting it to earthquakes and severe

volcanic activity.” —CIA World Factbook (material that expires after 30 days)



James Hemings

“James Hemings, brother to Sally Hemings was the first American to train as a chef in France. He was enslaved by Thomas Jefferson at 8.

The Chef de cuisine is the reason macaroni and cheese made it to America. Ê

James Hemings was born in 1765 into slavery and lived much of his life enslaved. He was among the many enslaved people who came into Thomas Jefferson's possession through his wife's inheritance.

In May 1784, Hemings received a summons to join Jefferson in Philadelphia. From there they travelled to Paris where he was trained in the art of French cooking. At a time when illiteracy was imposed on all African people, he was not only literate but fluent in English and French.

James went on to make culinary history. He ran the kitchens of Jefferson's residence on the Champs-Élysées, overseeing meals served to the notables of Europe. This made him the first American chef to be head cook at an American embassy.

Macaroni & cheese, vanilla ice cream, French fries, crème brûlée, meringues, and many other foods were introduced by Hemings, though Jefferson got the credit.

James continued his legacy and became one of the nation's most influential culinary instructors. His transfer of knowledge impacted Black cooks, caterers, and chefs who were instrumental in developing American dining.

Hemings life was cut tragically short in 1801 through suicide at 36; a letter addressed to Jefferson said that the cause was “drinking too freely.” Ultimately he left an important legacy in

culinary history. He helped to create and define American Cuisine as we know it today!”

—[African & Black History](#)

Ernest Hemmingway

“Now is no time to think of what you do not have. Think of what you can do with what there is.” —Ernest Hemmingway, *The Old Man and the Sea*

See: herbs and spices

See: herbal bath

René Georges Hermann-Paul

René Georges Hermann-Paul created this illustration (called Barbarie - Civilisation) in 1899 at the start of the Boxer rebellion in China. It was accompanied by the caption “It’s all a matter of perspective. When a Chinese coolie strikes a French soldier the result is a public cry of ‘Barbarity!’ But when a French soldier strikes a coolie, it’s a necessary blow for civilization.”



Jenni Hermoso

26 August 2023: “The Spanish football federation announces that, instead of removing president Luis Rubiales, they will take legal action against player Jenni Hermoso as they claim she ‘lied’ about non-consensual kiss.

The federation also says players have an “obligation” to play for the national team after 81 female players said they would not play until Rubiales was removed, in solidarity with Jenni Hermoso.

[NOTE: there is video footage of the incident.]” —[Pop Base](#)

Heru sa Aset

24 Deecember 2023: “On #StatueSunday, here is a 2200 year old falcon statue from the Ptolemaic temple of Edfu I snapped last week.

A physical manifestation of the god Horus emerging from the temple rather than a guardian to the god's own domain. Note the double crown is made separately.” —[Dr Campbell Price](#)



Het Heret

Het Heret is an Egyptian Goddess.

See: **.hex** — file extension

hidden

keyword: JavaScript windows property

hierarchy

“HIERARCHY — Government which is typically religious in nature and generally similar to a feodality.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

Michael Higgins

“We have arrived at a highly critical juncture when the dominant models of economic growth have been proven to damage social cohesion, democratic life, as well as the future of life itself on our fragile, vulnerable planet.” —Michael Higgins, president of Ireland

highereducation

From 1862 to 1969 every state in the union provided free public higher education.

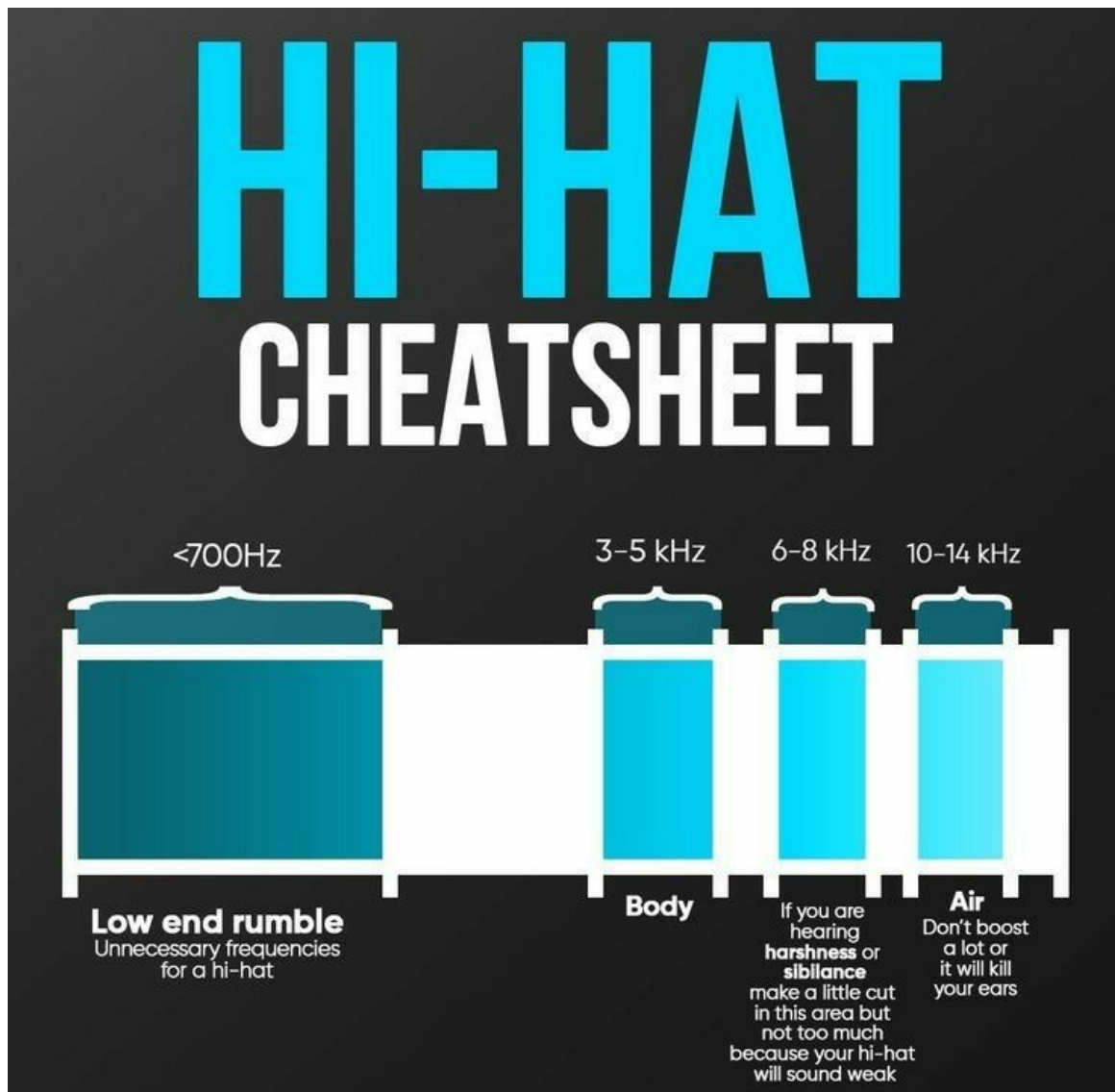
In 1969 California Governor Ronald Reagan ended it in California out of hatred against Black people< calling it “welfare.”

25 July 2023: “It’s absolutely wild how folks will assume that someone teaching at a university must be making big bucks - do you not understand how most of the teaching is done by untenured, precariously-employed and underpaid folks? Please get a grip.”

—[âpihtawikosisân](#)

hi hat

25 September 2023: “hi hat cheat sheet” —[Solar Heavy](#)



25 September 2023: “sometimes you can add boosting + dyn-eq down at same time, so when really hot signal it goes down and at same time normally a little up, a trick to lows and highs, but why not to mids too? Sure that all with care and analysis! Nice sheet!!!” —[Semoge](#)

28 September 2023: “hi hat cheat sheet” —[Solar Heavy](#)



high-value

keyword: COBOL reserved word (z/OS)

high-values

keyword: COBOL reserved word (z/OS)

high_values

keyword: SQL reserved word (z/OS)

Anita Hill

“Biden told me personally that he didn’t believe her. He said I don’t know why she did this. I don’t mean to malign Joe, but Joe told me he didn’t believe her, and there were some others that told me that too.” —Senator Orrin Hatch, R-Utah, 18 September 2019 on *the Confirmation Chronicles Volume 2: High Tech Lynching*

hintend

keyword: SQL reserved word (z/OS)

hint_error

keyword: SQL reserved word (z/OS)

hintstart

keyword: SQL reserved word (z/OS)

hishi karada

Hishi Karada (Diamond Pattern Tie): This is a decorative body harness that results in a diamond-shaped pattern across the body.

See also: shibari

See: histidine

History

keyword: History (initial cap) JavaScript windows object

Hitler

27 October 1928 (Hitler's Nazism was Christian and anti-socialist): "Everywhere you look today you can see the longing for a new idea. The destiny of Germany, not the individual destiny, must be decisive for these. All Marxist errors must be overcome. Successful economic policy requires power politics. To do this, Germany needs a new courageous attitude. Only the thought of the leader personality can save Germany. The question of the form of government is not up for discussion; it is necessary that the principles of the state correspond to moral feeling. This works in the unselfishness of the movement: the individual gets nothing for his sacrifices, but the future gets life!

Through the limitless sense of sacrifice that already enthalls millions today, a sense of sacrifice that also reaches beyond the borders of the country. She has already driven a symbol beyond the marked German borders. It is the national color of the coming new generation. The bourgeoisie like it. Parties look beyond the border posts, the new Germany already sees the new form in front of it, which consistently overlooks this junk, a form that will create the prerequisites that are necessary on the outside. For us, Parliament is a fencing ground on which our world view is represented. In particular, we do not believe that Parliament will save Germany, that a German National Assembly could do that, rather that the idea of a leader can one day save Germany! This movement has received an extraordinary degree of freedom of operation, which in the highest sense of the word allows everything to be put aside that could in any way divide the people.

We have different faiths in Germany, but we are one: which faith conquers the other, that is not the question, rather whether Christianity stands or falls, that is the question! Today we see before us the inheritance of the people, touching everything. There is no then into which any piece of his heaven is pointed. We will never allow a religious quarrel to arise in this movement, we say rather: the church may educate the parties to religious service, we educate them to fight and to preserve its world view and its foundations! We are convinced that when Christ descends on earth today, that he will not refuse blessings to those who strive to put Christianity into practice, to remove mutual self-help, class struggle, and status arrogance, we will strive, strive to make it clear to everyone that it's a shame not wanting to see the need after we're trying to suppress German culture being dragged down. **We do not tolerate anyone in our ranks who offends the ideas of Christianity, who stands up to a dissident, fights him, or provokes himself as a hereditary enemy of Christianity. This movement of ours is actually Christian.**

We are filled with the wish that Catholics and Protestants may find one another in the deep need of our own people. We will stop any attempt to bring religious thought up for discussion in any way within our movement. And when we fight the Center [Party], we don't do it for religious reasons, but because it makes fun of the word "Christianity" and scorns it because it is willing to

throw Christianity overboard for the ministerial chair. We are fighting the Center for national political reasons, not because it wants to be a Catholic party. Beware of those who walk in sheep's clothing! We reserve the right not to degrade Christianity to political service.” —Adolf Hitler 27 October 1928 at Passau

hojojutsu

Hojojutsu: The ancient martial art of restraining captives, from which Shibari is thought to have derived.

See also: shibari

home buying

17 July 2023: “Wall Street has purchased hundreds of thousands of single-family homes since the Great Recession, per CNBC.” —[unusual_wales](#)

17 July 2023: CNBC: “The single-family rental industry got its start with government backing in the fallout after the 2008 financial crisis... Since the early 2010s, Tricon Residential, Progress Residential, American Homes 4 Rent and Invitation Homes have each bought thousands of home... [s]ome of these companies are financed by private equity firms such as Blackstone and investment managers such as Pretium Partners.” —[aufait13](#)

17 July 2023: “As Sr Asset Manager of a multinational bank, I argued with regulators when they ordered our bank to sell residential RE portfolios to funds for 30¢ on the \$. CNBC now talking about what was well known throughout the industry. Then Sec of Treasury Paulson and ex Goldman CEO gave the order. Period, case close. Meanwhile #fintwit and 99% of country oblivious of what really happened.” —[Sebastián](#)

18 July 2023: “The people telling you that are billionaires & their media lackeys who know it's not true. The plan is to scoop up millions of single family homes, which make housing prices go ↑, then charge exorbitant rent to make profit for their REIT investors.” —[Madhouse Muse](#)

18 July 2023: “They actually don't want you to buy homes. The Fed raising interest rates has only helped their cause because while they have Wall St \$ to continue buying homes, most people can't afford ↑ interest rate & won't buy now, which leaves less competition for companies on buying spree” —[Madhouse Muse](#)

13 January 2024: “No one can afford to exist anymore
Millenials are ‘carpooling for homes’ by teaming up with non-romantic co-buyers because of

the disastrous state of the housing market

Gen Zers and millenials are leading the charge on co-ownership in a historically challenging housing market” —[Amazon Piss Jugs](#)

13 january 2024: “I saw last year that some states are trying to make it illegal to live with non-relatives to get ahead of this...

Capitalism is psychopathic. These people have more money than their great, great, great heirs could ever spend, and it's never enough for them to share.” —[Stephanie Voltolin](#)

homeless

1933: The Nazi Party passed a law “against Habitual and Dangerous Criminals”, which allowed for the relocation of beggars, homeless, and the unemployed to concentration camps.

1 January 2023: “40% of homeless people in the United States have either a part time or a full-time job.” —[Say it loud](#)

17 March 2023: “187 homeless Torontonians died in 2022, per new numbers from @TOPublicHealth, released today.

110 of those were in City-funded shelters, though, which raises a lot of questions that start with “What the fuck...” ” —[Gru](#)

18 March 2023: “ “Homeless survive winter: Now what?”

These people are gross” —[@503i7](#)



19 March 2023: "Self sustainability grow your own and support those that grow the food that feed you" — [Sacramento Homeless Union](#): includes short video

20 March 2023: "This a good video speaking about the reality of the quickly growing homeless crisis in this country." — [Imposter](#): See the video in the tweet: more than half of homeless people have a job

25 July 2023: "When they make it illegal to feed hungry people, and the cops actually uphold that law without reservation, it's time to admit you live in an authoritarian police state run by oligarchs who want to control every resource and every minute of your time for their benefit." — [Johnny Akzam](#)

24 August 2023: "The LA City Council that consists of all Democrats and 1 independent voted to criminalize being homeless. They're voting on something similar in San Jose. And at the state level Gavin Newsom is spending millions to conduct sweeps. They won't fund social housing because they're owned by big real estate developers." — [Ryan Knight](#)

24 August 2023: "The war against the homeless right now in the United States is an abomination and it is being led by Democrats in California who are criminalizing homelessness

and conducting sweeps instead of funding social housing.” —[Ryan Knight](#)

24 August 2023: “The number of Americans without enough food to eat has increased for the fifth straight month and homelessness is at a record high, but the only thing Democrats care about is gaslighting us about how “great the economy is” and bragging about Trump getting arrested. ” —[Ryan Knight](#)

25 August 2023: “From an unhoused man I just gave a hygiene kit to: “It’s crazy because a week ago I was just like these ppl, before the eviction. Living there *points at the building on corner*. Every morning, I’d say good morning to everyone. Now, no one looks at me. No one says good morning.”

“I’m the same person I was when I was under a roof and four walls. More stressed and sleep deprived and with less stuff but the same person. No more good mornings until I get inside I guess.”

Hygiene kit: Baby wipes, socks, hand sanitizer, a mask, black plastic bags, lotion, sunscreen, a sweet and a savory snack, menstrual products! I change some things depending on the season like adding hand warmers.” —[Housing 4 All is Hot](#)

29 August 2023: “On homelessness, @ElonMusk has touched on a key issue.

California has made record investments — \$15.3 bil.

But federal courts block local efforts to clear street encampments — even when housing and services are offered.

Courts must also be held accountable. Enough is enough.” —[Gavin Newsom](#)

29 August 2023: “Absolutely” —[Elon Musk](#)

29 August 2023: “that’s absolutely right. Drug free doesn’t work. Halfway houses should offer meals, counseling & healthcare, but it can’t be forced or required because that doesn’t work. Cities with successful programs offer, but don’t require [drug free].” —[Kirk Spano](#)

29 August 2023: “Gavin Newsom agreeing with Elon Musk on homelessness policy, should make it clear that California is criminalizing the poor as their solution to this crisis.

Notice how his main complaint is courts keeping him from “clearing encampments,” not getting people into housing.” —[Housing 4 All is Hot](#)

2 September 2023: “The war against the homeless is happening under Biden & the Democrat’s watch so I don’t want to hear one more comfortable liberal harass or shame people for supporting 3rd parties & direct action. We live under a fascist oligarchy & supporting either fascist party is COMPLICITY.

1. End unemployment benefits.
2. End eviction moratorium.
3. Create thousands of new homeless.
4. Criminalize being homeless.

5. Arrest poor people, put them in private prisons to do slave labor for corporations.” —[Ryan](#)

[Knight](#)

30 September 2023: “Incredibly, this massive new initiative targeting homeless people with mental illness **doesn’t provide any new housing or any new mental health services.**” —[Alec Karakatsanis](#)

30 September 2023: “Fourth, after stoking fear of homeless people shoplifting, Newsom announced what he billed as the largest ever single investment in police to target them.” —[Alec Karakatsanis](#)

12 September 2023: “NEW: @GavinNewsom says CA is poised to make largest-ever single investment to combat organized retail theft: \$267M to 55 law enforcement agencies.

“When shameless criminals walk out of stores with stolen goods, they’ll walk straight into jail cells,” Newsom says in statement.” —[Emily Hoeven](#)

30 September 2023: “At a time of rising authoritarianism, the threat people like Newsome pose is extraordinary. Not only is the content of what he is saying monstrous, but the moment in which he is saying it is one of great peril for a society struggling to maintain basic democratic values.” —[Alec Karakatsanis](#)

30 September 2023: “THREAD. The recent behavior of Gavin Newsom on the issue of homelessness is among the most alarming things I’ve seen from a Democratic Party politician in recent years. If you haven’t been following, I collect four examples here.” —[Alec Karakatsanis](#)

30 September 2023: “First, he recently spoken openly about how he was so mad about federal judges protecting the constitutional rights of homeless people that he thought about doxing the personal contact information of judges so mobs of angry people could intimidate them.” —[Alec Karakatsanis](#)

30 August 2023: “THREAD. Yesterday, the sitting Governor of California, a Democrat, was so angry that judges applying basic constitutional principles wouldn’t let armed government agents clear homeless people off the street that he began talking about inciting vigilante mobs against the judges:

Time and again, Newsom and other Democratic Party officials call themselves “progressive” and use that label to push some of the most cruel, ineffective, and authoritarian policies. So, how can we figure out when prominent people and their policies are actually progressive?” —[Alec Karakatsanis](#)

30 September 2023: “Second, he is trying to get the right wing of the Supreme Court to overturn a bedrock constitutional principle in order to permit the government to put homeless people in cages for simply existing on the street *even when there is no shelter space.*” —[Alec Karakatsanis](#)

28 September 2023: “The legal issue here is whether the government can put human beings in cages for living on the street *even if there is no available shelter.* Pretending this barbaric attempt to criminalize the poor is new or a “rare” agreement btw political parties is a lie.

The New York Times: In rare alliance, Democrats and Republicans seek legal power to clear

homeless camps. Dozens of leaders, mostly from Western states, have asked the Supreme Court to overturn lower court decisions that restrict enforcement against public camping.” —[Alec Karakatsanis](#)

30 September 2023: “Existing law, which outrages Newsom, is government can jail people for being on the street, but only if there’s available shelter such that people are choosing to be on street instead of shelter. If people have nowhere to go, the courts said it’s unconstitutional to cage them.” —[Alec Karakatsanis](#)

30 September 2023: “Third, Newsom quietly did something remarkable. He created an entire new court bureaucracy in California, marketed with the acronym CARE, that seeks to dramatically expand the power and capacity of courts to coerce treatment of mentally ill people.” —[Alec Karakatsanis](#)

7 September 2023: “THREAD. California politicians are about to complete an epic charade. The Governor is about to sign into law a massive new bureaucracy called “CARE Court,” which stands for Community Assistance, Recovery and Empowerment Court. It’s a story not getting enough attention.

I’m writing about CARE Court for two reasons: 1) It illustrates how bureaucrats craft “reforms” that make the structural problems of our society worse; 2) CA politicians co-opted the language of “care” in service of an unprecedented expansion of state control and repression.

Remember: Status quo elites and people who own things win every time public is told structural problems of inequality (like housing) can be solved not by confronting the things leading to inequality, but by regulating that inequality with more layers of state power and control.

So, what is CARE Court? For background, read the basics about why it is so alarming in this Human Rights Watch analysis. In short, the plan creates an entirely new coercive court system in every county in California at significant cost to taxpayers.

Court gets power to coerce “treatment,” targeting people with mental illness and unhoused. All backed threat of conservatorship (people lose power to make decisions over their lives/bodies), and the power of government to use violence to enforce court orders.

The law itself does not ensure or provide ****any new housing or treatment capacity**** for a system that is already in a crisis of scarcity. The new bureaucracy operates entirely separately from any investment or initiatives in the actual care that would be provided to people.

You also have to understand that the push for CARE Court by Governor Newsom is coming against the backdrop of four larger phenomena:

1. A historic increase in inequality and shortage of affordable housing in California that causes widespread homelessness and housing insecurity;
2. A pervasive lack of sufficient treatment, either with respect to trained personnel or the physical infrastructure required to care for people’s medical problems;
3. A growing criminalization of poverty and mental illness, seen most recently in the wave of California cities criminalizing sitting, lying, or sleeping in public.
4. Elite political and upper class circles in California have been buzzing about the “disorder” on California’s streets. The sense of urgency to “do something” or to *appear to be*

doing something about homelessness and mental illness has become a sort of obsession among people who see themselves as members of the political elite in California. This groupthink likely explains why Newsom's plan passed the Senate 38-0 and the Assembly 62-2.

CARE Court won't solve homelessness or mental illness, it makes things worse. The bill is widely opposed by civil rights, human rights, mental health, medical, homelessness, and disability advocacy organizations. Experts agree that coerced treatment is terrible policy:

1. Forcing people to obtain "treatment" against their will is not an effective medical intervention.

2. Even the most coercive bureaucracy in the world will not solve a basic problem of math: California has not committed to doing anywhere what it takes to provide the supportive housing and mental health infrastructure to make a dent in the problem.

3. By diverting enormous sums of money and personnel into creating an entirely new government bureaucracy full of judges, court personnel, liaisons to other existing bureaucracies, consultants, county government lawyers, public defenders, etc... the CARE Court diverts enormous sums of money away from the investments that are needed and creates an additional layer that actually makes it harder for people to get what they need. (Anyone unfamiliar with the woeful inefficiency of California's various existing court bureaucracies should read *The Trial* by Franz Kafka and then imagine something even larger and more ineffective at solving social problems).

The Plan will hurt Californians in need of housing who do not suffer from mental illness by requiring counties to prioritize CARE Court participants for services and placement but not actually increasing the number of available places to live or the accessibility of services. So the bill will actually exacerbate the problems faced by other populations of people who are housing insecure or in need of treatment.

So, what's really going on? Well, an unprecedented movement has come together in California and across in U.S. to replace bureaucracies of control with investments in care. A big problem? Elites don't actually want to create more affordable housing or universal health care.

In my view, this language of investments in the things people need to flourish and a focus on helping community-based delivery of those things, is threatening both to existing bloated bureaucracies (like courts, police, prosecutors, prisons, probation, parole, etc.) but also to powerful interests who depend on certain features of housing and health care systems to make profits. Investments in care are popular among ordinary people and are backed by scientific consensus that those investments promote safety far more than police/prisons/courts.

I believe that this narrative/policy threat from people who are building alternative systems of "care" is a significant factor in the development/marketing of CARE Court by politicians, bureaucrats, and profiteers who profit from systems of isolation, punishment, and extraction.

There may not be a home for you to live in, but there's now a judge who can order you to live in it. And in liberal fashion, CA will provide, with tax \$\$\$, a lawyer to represent you in a court battle over whether to force you to get treatment from a provider who doesn't exist.

This represents another prominent example of a ruling political class that is incapable of actually addressing the structural problems of our society, particularly the lack of affordable housing, the lack of universal access to medical care, and growing inequality.

So, unwilling to do things that would be required to solve the problem, but threatened by a

popular narrative from grassroots movements about the need to provide people the things they need to survive, the political elite turn to a marketing mirage: their own rhetoric of “care.”

The goal? Make what they say hard to distinguish from what people actually interested in “care” want. It’s mass obfuscation that traps us in an endless PR loop designed to trick people into thinking that those in power are well-meaning and working on the big problems of society.

All of this carries with it the same dangers that I wrote about with virtually every recent “criminal justice reform” in my book *Usual Cruelty*.

These reforms are designed to take away energy from radical changes by convincing well meaning but low-information voters who care about holistic well-being to support changes that do nothing to fix problems precisely because they preserve underlying root causes of the problems.

And this is how you should see their rhetoric. They claim the law is about “preserving self-determination” and “self-sufficiency,” and “empowering.” The very title is chosen so that everyone who hears about it on TV or in the paper immediately thinks about the concept of “care.”

And it works. Here’s how the *San Diego Union Tribune* and *SF Chronicle* naively described the impetus behind the law, essentially reprinting claims from the Governor that the legislation is about “helping” the state’s most vulnerable people.

Only a profoundly lost government would unanimously pass a bill targeting homelessness that doesn’t provide any homes.

Only a concerted propaganda effort can portray coerced government intervention opposed as ineffective and inhumane by the actual experts who devote their lives to working on these issues as *Compassion*.

Only the most cynical political elite would portray a court bureaucracy using threats of eventual violence to force involuntary treatment as ‘preserving self-determination.’ ” —[Alec Karakatsanis](#)

14 October 20223: “If you’re in a major US city and you run into a large weird area with weird shaped rocks or awkward decor and are wondering what it is or why it’s there, it’s always hostile architecture to torture homeless people.” —[Housing 4 All is Hot](#)



1 December 2023: “The home of “the free and the brave”.” —[Socialist Planning Beyond Capitalism](#)



2 December 2023: “I went out to tell some of my unhoused friends about the killer targeting unhoused people while they slept, and one of them told me, “It’s okay. I’m afraid every night. Tonight isn’t any different. If it’s not him today it’s someone else tomorrow yknow? I’m always scared.” ” —[Housing 4 All is Hot](#)

20 December 2023: “Homeless outreach teams be like, “Here’s a 50 lb box of food and water for you to lug around everywhere. And a list of shelters that are like jails” ” —[Bodhi](#)

6 January 2024: “There is a homeless woman screaming at the top of the hill. But you know what? I ain’t even mad. It’s freezing out there, and I have the privilege of being inside a tent wrapped in a blanket.

Housed ppl don’t care. They just want the disturbance gone and back to their lives of mindless consumption.” —[Bodhi](#)

13 January 2024: “A lot of yall can’t live inside your warm house and eat food 3x a day without consuming alcohol and marijuana but wanna be in my mentions calling people who sleep on concrete addicts” —[Val for Nevada](#)

13 January 2024: “In the murder tunnels of Gaza, our forces have found copies of Hitler’s Mein Kampf. In a home in Gaza, they found a child’s tablet with a picture of Hitler as the screensaver.” —[Prime Minister of Israel](#)

13 January 2024: “Yesterday, I spoke with Chancellor Scholz and I thanked him for Germany’s willingness to send a delegation to The Hague to help refute this despicable lie.” —[Prime Minister of Israel](#)

FULL TRANSCRIPT:

Citizens of Israel,

Today, we mark 100 days of the war, 100 days since the terrible day on which our citizens were massacred and taken hostage.

We are continuing the war until the end Ð until total victory, until we achieve all of our goals: Eliminating Hamas, returning all of our hostages and ensuring that Gaza will never again constitute a threat to Israel.

We will restore security to both the south and the north. Nobody will stop us Ð not The Hague, not the axis of evil and not anybody else.

The hypocritical onslaught at The Hague against the state of the Jews that arose from the ashes of the Holocaust, at the behest of those who came to perpetrate another Holocaust against the Jews Ð is a moral low point in the history of nations.

In the murder tunnels of Gaza, our forces have found copies of Hitler’s Mein Kampf. In a home in Gaza, they found a child’s tablet with a picture of Hitler as the screensaver.

Not for nothing did German Chancellor Scholz, after viewing the atrocities of the October 7 massacre, say: ‘Hamas are the new Nazis.’

Yesterday, I spoke with Chancellor Scholz and I thanked him for Germany’s willingness to send a delegation to The Hague to help refute this despicable lie.

But see the depth of the absurdity and the hypocrisy: Supporters of the new Nazis dare to accuse us of genocide. Who do they support? Murderers, rapists, those who decapitate and those who burn babies?!

What brazen gall. What a disgrace.

The State of Israel, the IDF and our security services are fighting a moral and just war that is without parallel, against the Hamas monsters, the new Nazis.

This international campaign of denigration will not weaken either our hand or our determination to fight until the end, because something has changed in the history of our people.

The antisemitism is the same antisemitism but the status of the Jewish people has

fundamentally changed. Today we have a state. We have defense forces and heroic soldiers to protect our people. What happened on October 7 will not happen again. This is our mission. Our obligation.

Tomorrow we will submit a budget that will ensure the continuation of the war: More money and a lot more for security. More compensation and grants for reservists, families, the self-employed and for all who are bearing the burden.

More assistance to return evacuees to their homes and for rebuilding the communities and the kibbutzim.

We are on the path to victory. We will not stop until we achieve victory. We are doing this together to the end. I believe in our people, in our soldiers and commanders, and I believe that after the massacre of Oct. 7, we will not compromise on anything less than total victory.

I say this, on your behalf, to every world leader who I speak with and we will not compromise and we will not stop. We are continuing until victory; we have no other choice.

In recent weeks, we have proven to Hamas and Hezbollah that every terrorist is a dead man, wherever they are. We are continuing to eliminate many terrorists and we are doing so in two ways:

In forceful military activity in which most Hamas battalions have been eliminated and clearing actions to eliminate additional terrorists left in the field, above and below ground. These actions take time.

Several days ago, I met with Secretary of State Blinken. I thanked him for the American assistance and I emphasized to him: We embarked on this war after we were massacred. We are not stopping. We are continuing until we eliminate Hamas and return our hostages.

I told him something else: This is not just our war and it is also your war. This is the war of the sons of light against the sons of darkness.

This is a war against the axis of evil led by Iran and its three proxies: Hezbollah, Hamas and the Houthis.

And I added and I do not forget, not even for a moment, that in addition to the war in Gaza, in addition to the return of our hostages and the return of the residents to their homes in both the north and the south, we have another, constant, existential mission and To prevent Iran from attaining nuclear weapons. This is my mission. This is our mission. I told Secretary of State Blinken: 'This needs to be your highest mission too.'

I embrace the families of the hostages, with whom I and my wife meet all the time. These are personal, heart-rending meetings. We embrace them and listen to them.

We look at the photos of their loved ones and our loved ones. I gave them a clear promise and I repeat it today: I will not give up on anyone. We are obligated to returning them all home.

I embrace the wounded who have shown utmost heroism in the face of their war injuries. Every one of our fighters and commanders are true heroes who have given their souls to restore security to our country and return the residents to their homes and so it will be.

14 January 2024: "The Supreme Court announced it would hear a pivotal case that could decide if cities are allowed to fine or jail homeless people for sleeping outside

The case could transform homelessness policy in the United States" —[Philip Lewis](#)

home studio

23 November 2023: “gear cheat sheet” — [Solar Heavy](#)



23 November 2023: “The only thing I’d change is getting a keyboard that also has drum pads like an MPK mini or a Launchkey mini” — [Tim Woodruff](#)

23 November 2023: “The best part is that despite theme being cheap the Sony MDR 7506 is my go to headphones. Price or not.” — [Prophet](#)

23 November 2023: “I’m running an Antelope Audio Orion Studio TB3 interface with a i9 12th Gen, 690 MoBo, 64GB DDR5 and PCIe Gen 4 nvme SSD
Round trip latency at 96KHz = 2.8 mS” — [Guido](#)

23 November 2023: “I prefer the auturia minifuse. Same price, MUCH better quality” — [R-Zeta](#)

23 November 2023: “I honestly thing the Audient evo 4 is a significantly better starter for only being 30 dollars more retail price” —[Code Rogue](#)

23 November 2023: “extra PLUSPLUS for the SONY heaphones!!!! 40 years as a sound engineer and I still love them...” —[Karl Petermichl](#)

23 November 2023: “AT 2040 is the same price lmao” —[Helixx](#)

23 November 2023: “I’ve got this and rode nt1a mic and pop shield but the quality can anyone help to a cleaner quality” —[Amazing2cee](#)

23 November 2023: “Sony MDRs definitely get you the best bang for your buck out there.” —[Balto Lonewolf](#)

argumentum ad hominem

Argumentum Ad Hominem (Literally, “Argument to the Man.” Also called “Poisoning the Well” and “Personal Attack”): Attacking or praising the people who make an argument rather than discussing the argument itself. This practice is fallacious because the personal character of an individual is logically irrelevant to the truth or falseness of the argument itself. The statement “ $2+2=4$ ” is true regardless if is stated by a criminal, congressman, or a pastor. There are two subcategories:

(Abusive): To argue that proposals, assertions, or arguments must be false or dangerous because they originate with atheists, Christians, Muslims, Communists, the John Birch Society, Catholics, anti-Catholics, racists, anti-racists, feminists, misogynists (or any other group) is fallacious. This persuasion comes from irrational psychological transference rather than from an appeal to evidence or logic concerning the issue at hand. This is similar to the genetic fallacy.

(Circumstantial): To argue that opponents should accept or refute an argument only because of circumstances in their lives is a fallacy. If one’s adversary is a clergyman, suggesting that he should accept a particular argument because not to do so would be incompatible with the scriptures is a circumstantial fallacy. To argue that, because the reader is a Republican, he must vote for a specific measure is likewise a circumstantial fallacy. The opponent’s special circumstances do not affect the truth or untruth of a specific contention. The speaker or writer must find additional evidence beyond that to make a strong case.

—from Dr. L. Kip Wheeler’s (Carson-Newman University) *Logical Fallacies Handlist*

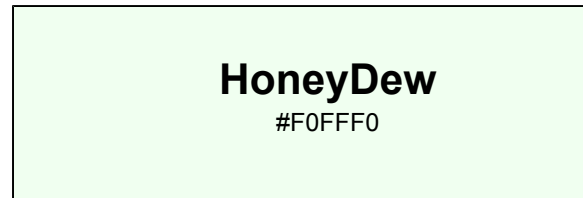
See: fallacies of relevance

Honey Bunches of Oats

Honey Bunches of Oats is banned in the European Union and Japan because they include Butylated hydroxytoluene (BHT), an artificial flavor enhancer that is carcinogenic.

HoneyDew

keyword: HTML color name



HongKong

Sunday, 9 December 2023: Hong Kong's local election had a historically low voter turnout of 27.5% after pro-democracy candidates were forbidden from running.

Voters refused to vote in protest against China's 2019 "Patriots only" policy..

hooligan

According to the *Oxford English Dictionary*, the word "hooligan" is derived from the Irish family name Houlihan and the mention of their raucous behavior in a song from the 1890s.

Hooper case

4 August 2023: "Cherokee Nation Principal Chief @ChuckHoskin_Jr issues statement on U.S. Supreme Court denies stay in Hooper case

Cherokee Nation Principal Chief Chuck Hoskin Jr. issues statement on US Supreme Court Denies Stay in Hooper case



“Today’s news from the U.S. Supreme Court affirms what we have said all along -- the best way forward is through collaboration, not wasteful legal fights. The 10th circuit’s Hooper decision upheld tribal sovereignty and settled federal law -- reaffirming that states and municipalities do not have criminal jurisdiction over Indians in Indian Country. Once again, we hope elected leaders throughout Oklahoma will join with tribes in meeting our shared public safety goals. I’m calling for collaboration, cooperation, and an end to the attacks on tribal sovereignty.” - **Cherokee Nation Principal Chief Chuck Hoskin Jr.**” — [Cherokee Nation](#)

Hooters

1 April 2001: “On April 1, 2001, Hooters held a beer sales contest for its employees, offering a Toyota as the grand prize. One employee, Jodee Berry, excelled in sales and won the contest. However, instead of receiving a car, she was given a toy Yoda with a note claiming the contest was an April Fools’ joke.

Berry sued Gulf Coast Wings, Inc., Hooters’ corporate owner, for breach of contract and fraudulent misrepresentation. In 2002, Berry and the company reached a settlement, with Berry receiving an undisclosed amount of money. Her attorney, David Noll, stated that the settlement would allow Berry to purchase any Toyota she desired.” — [Historic Vids](#)



hospitality workers

28 September 2023: “Hospitality workers in Las Vegas have voted to authorize a strike against major hotels and casinos. The Culinary Workers Union, which represents around 60,000 employees, said 95% of voters approved calling a strike if necessary.” —[PapaJ](#)

HotPink

keyword: HTML color name

HotPink
#FF69B4

hour

keyword: SQL reserved word (z/OS)

House car

noun “Any motor vehicle originally designed, or permanently altered, and equipped for human habitation, to which a camper has been permanently attached (Vehicle Code Section 362)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

housing

7 December 2023: “Democrats have introduced a bill in both houses of Congress to ban hedge funds from buying and owning single-family homes.

The bill would require all hedge funds to sell off all the single-family homes they own within 10 years, then prohibit them from owning any again.” —[More Perfect Union](#)

13 January 2024: “No one can afford to exist anymore

Millenials are ‘carpooling for homes’ by teaming up with non-romantic co-buyers because of the disatrous state of the housing market

Gen Zers and millenials are leading the charge on co-ownership in a historically challenging housing market” —[Amazon Piss Jugs](#)

13 january 2024: “I saw last year that some states are trying to make it illegal to live with non-relatives to get ahead of this...

Capitalism is psychopathic. These people have more money than their great, great, great heirs could ever spend, and it’s never enough for them to share.” —[Stephanie Voltolin](#)

Houthi

31 December 2023: “Multiple Reports that the US and UK are preparing to declare total war on the Houthis and Yemen

An Joint-Statement is reportedly expected to be made in the coming hours by the US, Britain and probably Germany, announcing that they are in Final Preparations for a Large-Scale Military

Operation against the Houthis in Yemen.

The attack will include the launch of Hundreds of Missiles and Airstrikes against Pre-Planned Targets in Western Yemen and the Red Sea.

Senior Houthi officials are in Tehran at the moment.” —[Megatron](#)

HP Multi-Programming Executive (MPE, MPE/XL, and MPE/iX)

operating system

Proprietary OS by Hewlett-Packard and Hewlett Packard Enterprise

runs on HP 3000 and HP e3000 mini-computers —[Wikipedia: List of operating systems](#)

HP-UX

abbreviation

operating system

Proprietary OS by Hewlett-Packard and Hewlett Packard Enterprise

runs on HP9000 and Itanium servers (from small to mainframe-class computers) —[Wikipedia: List of operating systems](#)

HT-11

operating system

Proprietary OS by Heathkit and Zenith Data Systems

a modified version of RT-11 that ran on the Heathkit H11 —[Wikipedia: List of operating systems](#)

See: .htm — file extension

See: `.html` — file extension

HTML entities

Reserved Characters in HTML

Some characters are reserved in HTML and XHTML. For example, you cannot use the greater than or less than signs within your text because the browser could mistake them for markup.

HTML and XHTML processors must support the five special characters listed in the table below:

Character	Entity Number	Entity Name	Description
"	"	"	quotation mark
'	'	' (does not work in IE)	apostrophe
&	&	&	ampersand
<	<	<	less-than
>	>	>	greater-than

Note: Entity names are case sensitive!

ISO 8859-1 Symbols

Character	Entity Number	Entity Name	Description
	 	 	non-breaking space
¡	¡	¡	inverted exclamation mark
¢	¢	¢	cent
£	£	£	pound
¤	¤	¤	currency
¥	¥	¥	yen

¡	¦	¦	broken vertical bar
§	§	§	section
¨	¨	¨	spacing diaeresis
©	©	©	copyright
ª	ª	ª	feminine ordinal indicator
«	«	«	angle quotation mark (left)
¬	¬	¬	negation
	­	­	soft hyphen
®	®	®	registered trademark
-	¯	¯	spacing macron
°	°	°	degree
±	±	±	plus-or-minus
²	²	²	superscript 2
³	³	³	superscript 3
´	´	´	spacing acute
μ	µ	µ	micro
¶	¶	¶	paragraph
·	·	·	middle dot
¸	¸	¸	spacing cedilla
¹	¹	¹	superscript 1
º	º	º	masculine ordinal indicator
»	»	»	angle quotation mark (right)
¼	¼	¼	fraction 1/4
½	½	½	fraction 1/2
¾	¾	¾	fraction 3/4
¿	¿	¿	inverted question mark
×	×	×	multiplication
÷	÷	÷	division

ISO 8859-1 Characters

Character	Entity Number	Entity Name	Description
À	À	À	capital a, grave accent
Á	Á	Á	capital a, acute accent
Â	Â	Â	capital a, circumflex accent
Ã	Ã	Ã	capital a, tilde
Ä	Ä	Ä	capital a, umlaut mark
Å	Å	Å	capital a, ring
Æ	Æ	Æ	capital ae
Ç	Ç	Ç	capital c, cedilla
È	È	È	capital e, grave accent
É	É	É	capital e, acute accent
Ê	Ê	Ê	capital e, circumflex accent
Ë	Ë	Ë	capital e, umlaut mark
Ì	Ì	Ì	capital i, grave accent
Í	Í	Í	capital i, acute accent
Î	Î	Î	capital i, circumflex accent
Ï	Ï	Ï	capital i, umlaut mark
Ð	Ð	Ð	capital eth, Icelandic
Ñ	Ñ	Ñ	capital n, tilde
Ò	Ò	Ò	capital o, grave accent
Ó	Ó	Ó	capital o, acute accent
Ô	Ô	Ô	capital o, circumflex accent
Õ	Õ	Õ	capital o, tilde
Ö	Ö	Ö	capital o, umlaut mark
Ø	Ø	Ø	capital o, slash

Û	Ù	Ù	capital u, grave accent
Ú	Ú	Ú	capital u, acute accent
Û	Û	Û	capital u, circumflex accent
Ü	Ü	Ü	capital u, umlaut mark
Ý	Ý	Ý	capital y, acute accent
Þ	Þ	Þ	capital THORN, Icelandic
ß	ß	ß	small sharp s, German
à	à	à	small a, grave accent
á	á	á	small a, acute accent
â	â	â	small a, circumflex accent
ã	ã	ã	small a, tilde
ä	ä	ä	small a, umlaut mark
å	å	å	small a, ring
æ	æ	æ	small ae
ç	ç	ç	small c, cedilla
è	è	è	small e, grave accent
é	é	é	small e, acute accent
ê	ê	ê	small e, circumflex accent
ë	ë	ë	small e, umlaut mark
ì	ì	ì	small i, grave accent
í	í	í	small i, acute accent
î	î	î	small i, circumflex accent
ï	ï	ï	small i, umlaut mark
ð	ð	ð	small eth, Icelandic
ñ	ñ	ñ	small n, tilde
ò	ò	ò	small o, grave accent
ó	ó	ó	small o, acute accent
ô	ô	ô	small o, circumflex accent
õ	õ	õ	small o, tilde
ö	ö	ö	small o, umlaut mark

ø	ø	ø	small o, slash
ù	ù	ù	small u, grave accent
ú	ú	ú	small u, acute accent
û	û	û	small u, circumflex accent
ü	ü	ü	small u, umlaut mark
ý	ý	ý	small y, acute accent
þ	þ	þ	small thorn, Icelandic
ÿ	ÿ	ÿ	small y, umlaut mark

Math Symbols Supported by HTML

Character	Entity Number	Entity Name	Description
∀	∀	∀	for all
∂	∂	∂	part
∃	∃	&exists;	exists
∅	∅	∅	empty
∇	∇	∇	nabla
∈	∈	∈	isin
∉	∉	∉	notin
∋	∋	∋	ni
∏	∏	∏	prod
∑	∑	∑	sum
−	−	−	minus
*	∗	∗	lowast
√	√	√	square root
∝	∝	∝	proportional to
∞	∞	∞	infinity
∠	∠	∠	angle
∧	∧	∧	and
∨	∨	∨	or
∩	∩	∩	cap
∪	∪	∪	cup

\int	∫	∫	integral
\therefore	∴	∴	therefore
\sim	∼	∼	similar to
\approx	≅	≅	approximately equal
\approx	≈	≈	almost equal
\neq	≠	&neq;	not equal
\equiv	≡	≡	equivalent
\leq	≤	≤	less or equal
\geq	≥	≥	greater or equal
\subset	⊂	⊂	subset of
\supset	⊃	⊃	superset of
$\not\subset$	⊄	⊅	not subset of
\subseteq	⊆	⊆	subset or equal
\supseteq	⊇	⊇	superset or equal
\oplus	⊕	⊕	circled plus
\otimes	⊗	⊗	circled times
\perp	⊥	⊥	perpendicular
\cdot	⋅	⋅	dot operator

Greek Letters Supported by HTML

Character	Entity Number	Entity Name	Description
A	Α	Α	Alpha
B	Β	Β	Beta
Γ	Γ	Γ	Gamma
Δ	Δ	Δ	Delta
E	Ε	Ε	Epsilon
Z	Ζ	Ζ	Zeta
H	Η	Η	Eta
Θ	Θ	Θ	Theta
I	Ι	Ι	Iota
K	Κ	Κ	Kappa

Λ	Λ	Λ	Lambda
Μ	Μ	Μ	Mu
Ν	Ν	Ν	Nu
Ξ	Ξ	Ξ	Xi
Ο	Ο	Ο	Omicron
Π	Π	Π	Pi
Ρ	Ρ	Ρ	Rho
	undefined		Sigmaf
Σ	Σ	Σ	Sigma
Τ	Τ	Τ	Tau
Υ	Υ	Υ	Upsilon
Φ	Φ	Φ	Phi
Χ	Χ	Χ	Chi
Ψ	Ψ	Ψ	Psi
Ω	Ω	Ω	Omega
α	α	α	alpha
β	β	β	beta
γ	γ	γ	gamma
δ	δ	δ	delta
ε	ε	ε	epsilon
ζ	ζ	ζ	zeta
η	η	η	eta
θ	θ	θ	theta
ι	ι	ι	iota
κ	κ	κ	kappa
λ	λ	&lambd;	lambda
μ	μ	μ	mu
ν	ν	ν	nu
ξ	ξ	ξ	xi
ο	ο	ο	omicron

π	π	π	pi
ρ	ρ	ρ	rho
ς	ς	ς	sigmaf
σ	σ	σ	sigma
τ	τ	τ	tau
υ	υ	υ	upsilon
φ	φ	φ	phi
χ	χ	χ	chi
ψ	ψ	ψ	psi
ω	ω	ω	omega
θ	ϑ	ϑ	theta symbol
Υ	ϒ	ϒ	upsilon symbol
ϖ	ϖ	ϖ	pi symbol

Other Entities Supported by HTML

Character	Entity Number	Entity Name	Description
Œ	Œ	Œ	capital ligature OE
œ	œ	œ	small ligature oe
Š	Š	Š	capital S with caron
š	š	š	small S with caron
Ÿ	Ÿ	Ÿ	capital Y with diaeres
f	ƒ	ƒ	f with hook
ˆ	ˆ	ˆ	modifier letter circumflex accent
˜	˜	˜	small tilde
	 	 	en space
	 	 	em space
	 	 	thin space
	‌	‌	zero width non-joiner

	‍	‍	zero width joiner
	‎	‎	left-to-right mark
	‏	‏	right-to-left mark
–	–	–	en dash
—	—	—	em dash
‘	‘	‘	left single quotation mark
’	’	’	right single quotation mark
,	‚	‚	single low-9 quotation mark
“	“	“	left double quotation mark
”	”	”	right double quotation mark
„	„	„	double low-9 quotation mark
†	†	†	dagger
‡	‡	‡	double dagger
●	•	•	bullet
...	…	…	horizontal ellipsis
‰	‰	‰	per mille
′	′	′	minutes
″	″	″	seconds
<	‹	‹	single left angle quotation
>	›	›	single right angle quotation
—	‾	‾	overline
€	€	€	euro
™	™	™	trademark
←	←	←	left arrow
↑	↑	↑	up arrow
→	→	→	right arrow
↓	↓	↓	down arrow
↔	↔	↔	left right arrow
↵	↵	↵	carriage return arrow
⌈	⌈	⌈	left ceiling
⌋	⌉	⌉	right ceiling

⌊	⌊	⌊	left floor
⌋	⌋	⌋	right floor
◊	◊	◊	lozenge
♠	♠	♠	spade
♣	♣	♣	club
♥	♥	♥	heart
♦	♦	♦	diamond

human chain

6 December 2023: “This is just a short stretch of the Baltic Way.

On 23 August 1989, approximately two million people joined their hands to form a human chain spanning 690 km (430Êmi) across the three Baltic states of Estonia, Latvia and Lithuania as a peaceful demonstration against Soviet oppression, and to support the independence movements of the three States and their desire to escape communism.

This protest was one of the earliest and longest unbroken human chains in history. Similar human chains were later organised in many East European countries and regions of the USSR.”

—[Massimo](#)



human rights

18 March 2023: “Why the ICC did not indicate these war criminals.

75% of Americans believe the U.S. should be the world’s police

Even after...

The US created the Taliban by arming the Mujahideen to fight the Soviets

Armed Saddam to fight Iran then overthrew him which led to a civil war in Iraq






Overthrew Gaddafi to stop a gold-backed currency and turned Libya into a failed state

Armed known terrorist groups in Syria in an attempt to overthrow Bashar Assad

The military industrial complex thanks you. Your ignornace is their strength. Stay distracted America.” —[Black diaspora Voice](#)



19 March 2023: “Joe Biden came out in his first year and labeled most of the Left as Domestic Violent Extremists and Democrats still expect the people Biden calls violent extremists to hold their nose and vote for him.” —[Starbucks Unions Form Like Voltron](#)

 <p>RACIALLY OR ETHNICALLY MOTIVATED VIOLENT EXTREMISTS</p> <p>DVEs with ideological agendas derived from bias, often related to race or ethnicity, held by the actor against others, including a given population group.</p>	 <p>ANTI-GOVERNMENT/ANTI-AUTHORITY VIOLENT EXTREMISTS</p> <p>DVEs with ideological agendas derived from anti-government or anti-authority sentiment, including opposition to perceived economic, social, or racial hierarchies; or perceived government overreach, negligence, or illegitimacy.</p> <p>MILITIA VIOLENT EXTREMISTS: DVEs who take overt steps to violently resist or facilitate the overthrow of the US Government in support of their belief that the US Government is purposely exceeding its Constitutional authority and is trying to establish a totalitarian regime; oppose many federal and state laws and regulations, particularly those related to firearms ownership.</p> <p>ANARCHIST VIOLENT EXTREMISTS: DVEs who oppose all forms of capitalism, corporate globalization, and governing institutions, which are perceived as harmful to society.</p> <p>SOVEREIGN CITIZEN VIOLENT EXTREMISTS: DVEs who believe they are immune from government authority and laws.</p>	 <p>ALL OTHER DOMESTIC TERRORISM THREATS</p> <p>DVEs with ideological agendas that are not otherwise defined under one of the other domestic terrorism threat categories, including a combination of personal grievances and beliefs with potential bias related to religion, gender, or sexual orientation.</p>
 <p>ANIMAL RIGHTS/ ENVIRONMENTAL VIOLENT EXTREMISTS</p> <p>DVEs seeking to end or mitigate perceived cruelty, harm, or exploitation of animals or perceived exploitation or destruction of natural resources and the environment.</p>		
 <p>ABORTION-RELATED VIOLENT EXTREMISTS</p> <p>DVEs with ideological agendas in support of pro-life or pro-choice beliefs.</p>		

Hungary

31 July 2023: The United States limited the American Visa Waiver Program for Hungarian citizens who have a passport issued between 2011 and 2020.

The American Visa Waiver Program allows citizens of 40 nations to travel to the US for tourism or business for up to 90 days without a visa using an Electronic System for Travel Authorization (ETST). The new limits only apply to Hungary.

hunger

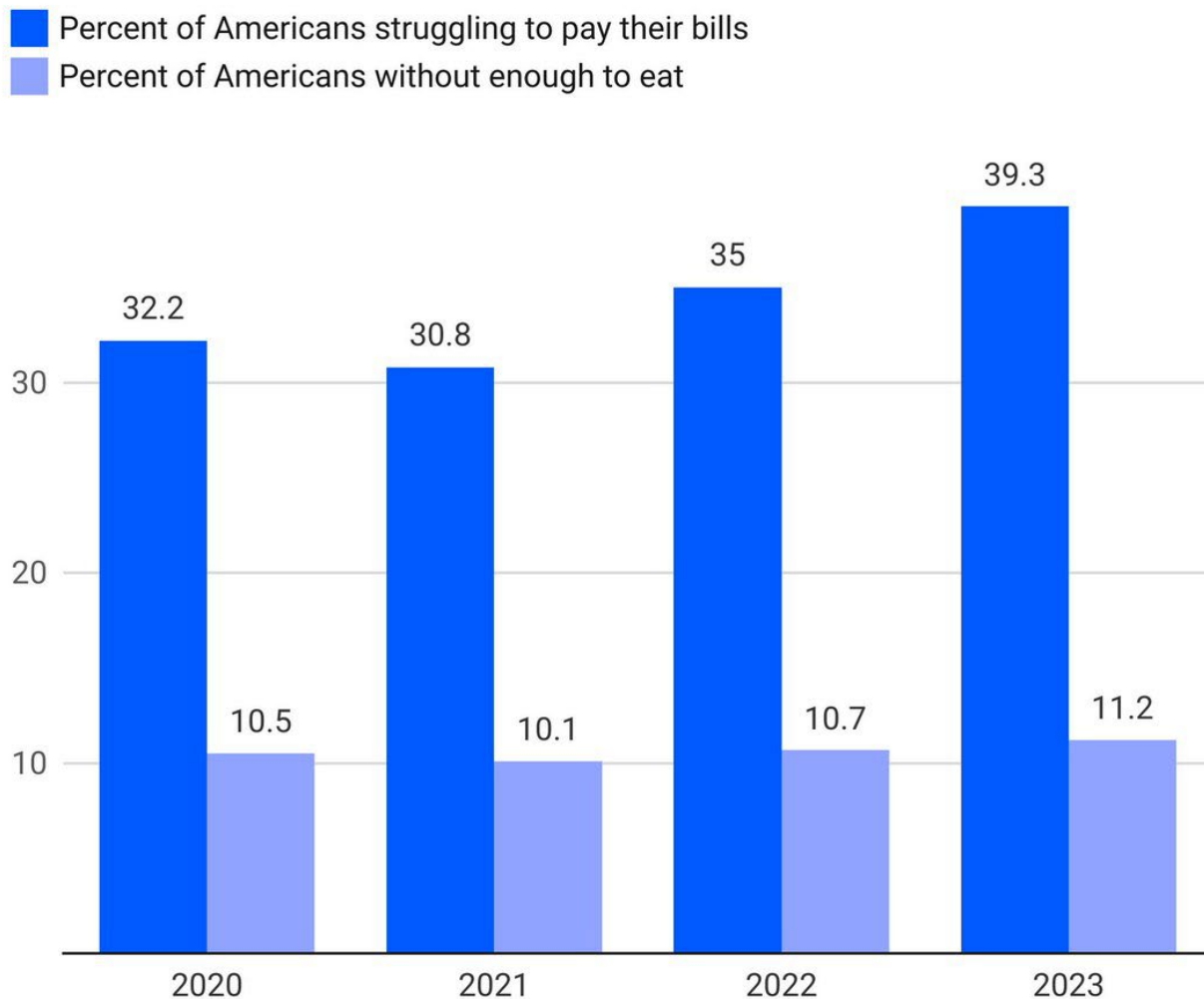
24 May 2023: “The omnibus bill Biden signed into law in December scheduled the termination of the food assistance program’s emergency funding. Have a look for yourself — Section 503(b), page 1536:” — [Stephen Semler](#); copy of the law: [H.R. 2617](#)

24 May 2023: “In the two months since Biden ended SNAP emergency allotments, an additional 1.3 million people reported not having enough to eat (per Census data).

Total food insecure population among US adults is now 25.4 million.” — [Stephen Semler](#)

4 August 2023: “Look at the data.” —[Stephanie Voltolin](#)

Financial hardship and food insecurity rates are rising in the US



Figures are fiscal year averages via US Census Bureau's Household Pulse Survey. Data as of June 2023. More: stephensemmler.substack.com

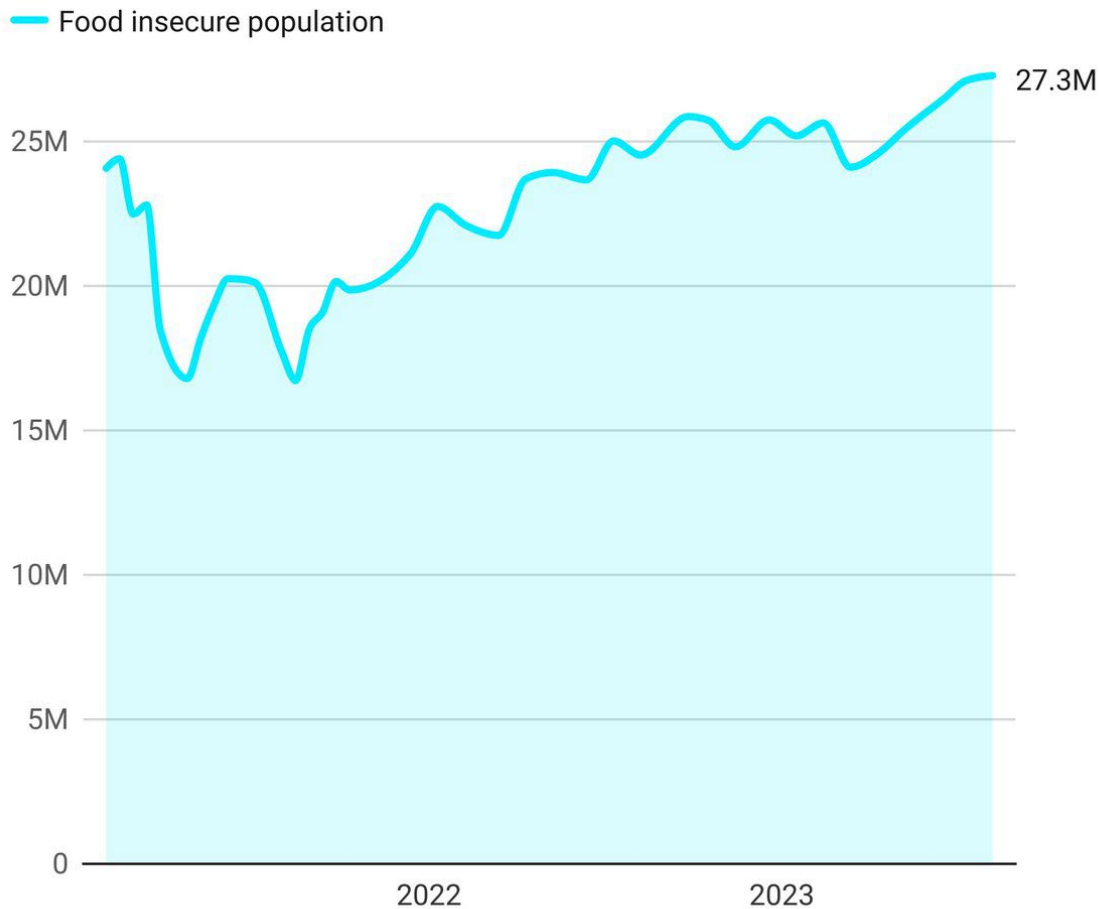
Chart: Stephen Semler (@stephensemmler) • Created with Datawrapper

14 August 2023: This is one liberals solution to widespread hunger (civics classes): “Most people have trouble putting food on the table, let alone spending the time and energy that it takes to understand that gerrymandering, winner-take-all, and private political party rules are f*cking them.

Maybe start with mandatory civics education in school?” —[Thermionic Studios](#)

19 August 2023: “The number of Americans without enough to eat has increased for the fifth straight month.” —[Stephen Semler](#)

Food insecurity tops previous Biden-era high



Data as of Aug 2023 via US Census Bureau Household Pulse Survey. Figures refer to US adults without enough to eat in the last 7 days. More: stephensemmler.substack.com

Chart: Stephen Semler (@stephensemmler) • Created with Datawrapper

24 August 2023: “The number of Americans without enough food to eat has increased for the fifth straight month and homelessness is at a record high, but the only thing Democrats care about is gaslighting us about how “great the economy is” and bragging about Trump getting arrested. ” —[Ryan Knight](#)

Aldous Huxley

“Facts do not cease to exist because they are ignored.” —Aldous Huxley

“The perfect dictatorship would have the appearance of a democracy, but would basically be a prison without walls in which the prisoners would not even dream of escaping. It would essentially be a system of slavery where, through consumption and entertainment, the slaves would love their servitudes.” —Aldous Huxley

hypnic jerks

“A hypnic jerk, hypnagogic jerk, sleep start, sleep twitch, myoclonic jerk, or night start is a brief and sudden involuntary contraction of the muscles of the body which occurs when a person is beginning to fall asleep, often causing the person to jump and awaken suddenly for a moment. Hypnic jerks are one form of involuntary muscle twitches called myoclonus.” —[Wikipedia](#)

I

ASCII: 49 hex

UNICODE: LATIN CAPITAL LETTER I

i

ASCII: 69 hex

UNICODE: LATIN SMALL LETTER i

I

part of speech: pronoun

Oxford English Corpus (OEC) rank: #10

Corpus of Contemporary American English (COCA): #11

Dolch level: Pre-primer

Polysemy: 7

IBM 4680 OS

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a Point of Sale (POS) operating system based on FlexOS — [Wikipedia: List of operating systems](#)

DOS

IBM 4690 OS

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a Point of Sale (POS) operating system based on FlexOS — [Wikipedia: List of operating systems](#)

DOS

IBSYS

abbreviation


operating system

Proprietary OS by IBM

tape based operating system for IBM 7090 and IBM 7094 — [Wikipedia: List of operating systems](#)

icepops

Ice pops (the most famous brand being Popsicle, were invented by Frank Epperson when at 11 years old he accidentally left water and soda powder outside overnight with a wooden stirrer in the cup.

See: .icns  — file extension

See: .ico  — file extension

See: **.icon** 🌐 — file extension

id

keyword: COBOL reserved word (z/OS)

keyword: Objective-C word

identification

keyword: COBOL reserved word (z/OS)

identified

keyword: SQL reserved word (Oracle)

identifying mark

noun “Any manufacturer mark or number assigned by the Department of Justice which has been engraved or affixed to the firearm” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

if

keyword: Ada reserved key word

keyword: C keyword

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (z/OS)

keyword: VHDL reserved key word

ifelse

keyword: SQL reserved word (z/OS)

IJMON

abbreviation

operating system

Proprietary OS by IBM

A bootable serial I/O monitor for loading programs for the IBM 1400 series — [Wikipedia: List of operating systems](#)

Image

keyword: Image (initial cap) JavaScript windows object

See: `_imaginary` — Objective C

imitation firearm

noun “A replica of a firearm so similar to an existing firearm that a reasonable person would think that it is a real firearm (Penal Code Section 16700)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

immediate

keyword: SQL reserved word (ANSI, Oracle)

IMP

keyword: Objective-C word

implement

keyword: Java reserved key word

implements

keyword: JavaScript reserved word

keyword: PHP reserved word

See: [@implementation](#) — Objective C

import

keyword: JavaScript reserved word

imports

keyword: Java reserved key word

impure

keyword: VHDL reserved key word

IMS Multiuser DOS

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

DOS

IMS REAL/32

operating system

Proprietary OS by Digital Research, Inc.

a derivative of Multiuser DOS — [Wikipedia: List of operating systems](#)

DOS

IMS REAL/NG

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

the successor of REAL/32 — [Wikipedia: List of operating systems](#)

DOS

in

part of speech: preposition

Oxford English Corpus (OEC) rank: #7

Corpus of Contemporary American English (COCA): #6, #128, #3038

Dolch level: Pre-primer

Polysemy: 23

in

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: JavaScript reserved word

keyword: Objective-C former reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

include

keyword: PHP reserved word

include_once

keyword: PHP reserved word

income caps

31 January 2022: “why does America put income caps on disabled people but not billionaires” —[softbabycarrot](#)

increment

keyword: SQL reserved word (Oracle)

index

function: C string.h library function: stands for INDEX string

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

indexed

keyword: COBOL reserved word (z/OS)

India

18 March 2023: “Eric Garcetti is accused of having direct knowledge of his top aid and good friend forcibly touching and kissing at least a dozen women w/out consent and doing nothing about it. So of course Joe Biden thought he’d make a great **ambassador to India** and of course Dems voted him in.” —[Professor Anthony Zenkus](#)

14 August 2023: “India has just made its first crude oil payment to United Arab Emirates in

Indian rupees, officially dropping the US dollar.” —[unusual_wales](#)

23 August 2023: India became the fourth nation to land on the Moon (after the US, Soviet Union, and China) at 6:04 pm in India on 23 August 2023. The Chandrayaan-3 landed near the Moon's south pole and released a rover.

2 September 2023: “India launches rocket to observe sun days after historic moon landing
India's space agency launches rocket to study the sun a little over a week after historic landing on moon's south pole.

India has launched a rocket to study the sun, a little over a week after its successful unmanned landing on the moon.

The Aditya-L1 rocket, carrying scientific instruments to observe the sun's outermost layers, blasted off at 11:50am (06:20 GMT) on Saturday for its four-month journey.” —[Aljazeera](#)

5 September 2023: India's Prime Minister Nareundra Modi sent out official invites for the upcoming G20 meeting using the term Bharat. Bharat is the Hindu word for India.

There is speculation that the Indian government might soon officially change the name of the nation to Bharat.

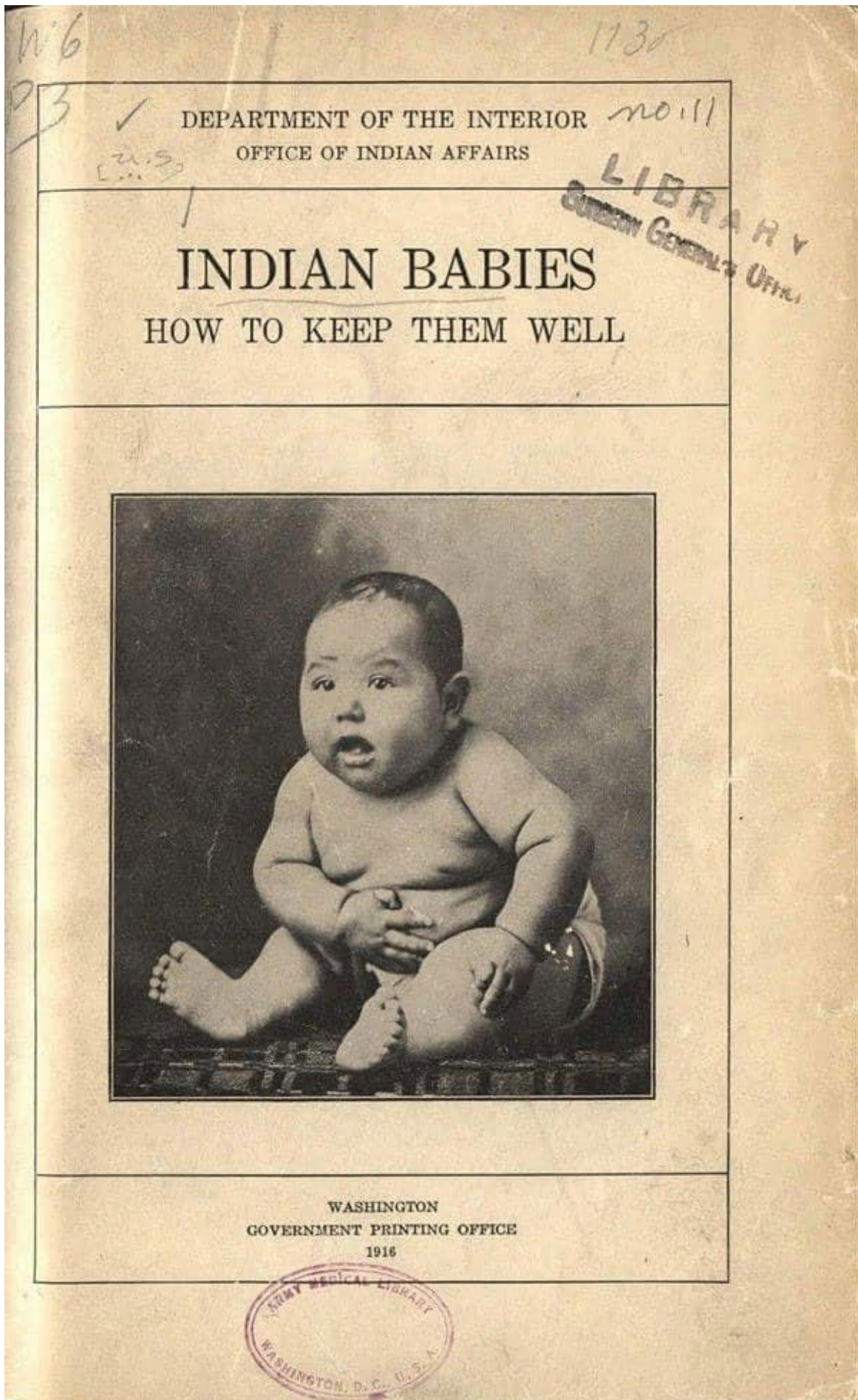
India's Supreme Court has upheld a controversial decision by the Indian government to revoke the special status of the Jammu and Kashmir majority Muslim state.

The special status in India's Constitution Article 370 gave the region significant autonomy. In 2019 Prime Minister Narendra Modi revoked the special status and split Jammu and Kashmir into two federally administrated territories, after which the Indian government imposed a security lockdown and communications blackout to suppress backlash.

The Indian Supreme Court ruled “the state of Jammu and Kashmir does not have internal sovereignty different from other states.”

Indian Act

“The great aim of our legislation has been to do away with the tribal system and assimilate the Indian people in all respects with the other inhabitants of the Dominion as speedily as they are fit to change.” —John A McDonald (creator of the Indian Act), 1887



Indian boarding schools

25 July 2023: “The estimated death toll from the mass genocide & extermination of First Nations people is 95,000,000 to 114,000,000.

Yes you read that right.

Below is a photo of an Indian Boarding School. Native children were torn from their families & forced into these schools to be fully indoctrinated into white Christian society. Thousands were murdered & their bodies hidden in unmarked graves.

If there's one article you read today, let it be this one which is an in-depth look at the plight of Native people over the “500 Year War”. — [LeftwardSwing](#): article: [Native American Genocide](#)



Indian Child Welfare Act

On Thursday, 15 June 2023, the US Supreme Court upheld the Indian Child Welfare Act (ICWA) 7-2 in the case [21-376 Haaland v. Brackeen](#).

Neil Gorsuch wrote in his concurring opinion: “Often, Native American Tribes have come to this court seeking justice only to leave with bowed heads and empty hands. But that is not because this Court has no justice to offer them. Our Constitution reserves for the Tribes to offer them. Our Constitution reserves for the Tribes a place—an enduring place—in the structure of

American life. **It promises them sovereignty for as long as the wish to keep it.** And it secures that promise by divesting States of authority over Indian affairs and by giving the federal government certain significant (but limited and enumerated) powers aimed at building a lasting peace. In adopting the Indian Child Welfare Act, Congress exercised that lawful authority to secure the right of Indian parents to raise their families as they please; the right of Indian children to grow in their culture; and the right of Indian communities to resist fading into the twilight of history. All of that is in keeping with the Constitution's original design."

"ICWA needs to be celebrated and we, Indigenous Peoples, need to face the fact that we need to reform enrollment so that our unenrolled family members have the same protections as the currently enrolled." —[Ol' Dirty Rez Dog](#)

Neil Gorsuch wrote in his concurring opinion: "The Indian Child Welfare Act did not emerge from a vacuum. It came as a direct response to the mass removal of Indian children from their families during the 1950s, 1960s, and 1970s by state officials and private parties. That practice, in turn, was only the latest iteration of a much older policy of removing Indian children from their families—one initially spearheaded by federal officials with the aid of their state counterparts nearly 150 years ago. In all its many forms, the dissolution of the Indian family has had devastating effects on children and parents alike. It has also presented an existential threat to the continued vitality of Tribes—something many federal and state officials over the years saw as a feature, not as a flaw. This is the story of ICWA. And with this story, it pays to start at the beginning."

IndianRed

keyword: HTML color name



indicate

keyword: COBOL reserved word (z/OS)

Indigo

keyword: HTML color name



Indonesia

“Our socialism does not include extreme materialistic concepts, since Indonesia is primarily a God-fearing, God-loving nation. Our socialism is a mixture. We draw political equality from the American Declaration of Independence. We draw spiritual equality from Islam and Christianity. We draw scientific equality from Marx.” —Sukarno

inertial

keyword: VHDL reserved key word

Inferno

operating system

Proprietary OS by Bell Labs.

Infinity

keyword: JavaScript property

inflation

31 May 2023: “Annual inflation has been nearly cut in half from its peak last year. We’re making continued progress lowering costs for families.” —[Joe Biden](#)

31 May 2023: “When Biden took office, inflation was at 1.4% Today [31 May 2023], inflation is at 4.9%, and has been outrageously high for over two years <https://twitter.com/TommyPigott/status/166400064208238182548>; —[Tommy Pigott](#)

1 September 2023: “Food, rent and gas are all going up. Inflation being lower doesn’t mean prices are coming down, it means they’re not going up as quickly as they have been. Everything is still more expensive than it was last year. Democrats - STOP LYING AND SAYING THE ECONOMY IS GREAT!” —[Professor Anthony Zenkus](#)

inhabited

noun “A structure used for dwelling purposes, whether presently occupied or not” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

inherits

keyword: COBOL reserved word (z/OS)

initial

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

initialize

keyword: COBOL reserved word (z/OS)

initiate

keyword: COBOL reserved word (z/OS)

injustice



“Injustice anywhere is a threat to justice everywhere.” —Martin Luther King, Jr.

inline

keyword: Objective-C reserved word

in_memory

keyword: SQL reserved word (z/OS)

inner

keyword: SQL reserved word (z/OS)

innerHeight

keyword: JavaScript windows method

innerWidth

keyword: JavaScript windows method

inout

keyword: Objective-C former reserved word

keyword: VHDL reserved key word

input

keyword: COBOL reserved word (z/OS)

input-output

keyword: COBOL reserved word (z/OS)

insectivore

“Insectivores include moles and shrews. These mammals eat primarily insects, other arthropods, and earthworms.” —[Groups of Mammals](#)

insert

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

inspect

keyword: COBOL reserved word (z/OS)

installation

keyword: COBOL reserved word (z/OS)

instanceof

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

insteadof

keyword: PHP reserved word

instruments

18 December 2023: “Why live instruments sound better than plugins?
Pretty much like live voice vs synthesized. It’s not always terrible but you def can tell it’s not

real.

Even if you prerecord sounds, combining them into a full recording can not sound as good and natural as the real recording.” —[Nathaniel W.](#)

int

keyword: C keyword: data type

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: SQL reserved word (z/OS)

integer

keyword: SQL reserved word (ANSI, Oracle, z/OS)

INTEGRITY

operating system

Proprietary OS by Green Hills Software

Reliable Operating system —[Wikipedia: List of operating systems](#)

INTEGRITY-178B

operating system

Proprietary OS by Green Hills Software

A DO-178B certified version of INTEGRITY. —[Wikipedia: List of operating systems](#)

interface

keyword: Ada reserved key word

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

interface, audio

20 September 2023: “gear cheat sheet” — [Solar Heavy](#)



See: @interface — Objective C

internet

in 'tər-net, *noun*

A global interconnected computer network using standardized communication protocols.

internment

During World War II, President Franklin D Roosevelt (FDR) ordered that all 120,000 Americans of Japanese ancestry be rounded up and forcibly placed in internment camps. Most were American citizens. half were children.

In an interview released 15 June 2023 by *Radio Free Europe/Radio Liberty* (run by the Biden administration) Czech President Petr Pvel said that Russians living in Western nations should be monitored in the same way as people of Japanese descent were in the US during World War II.

“All Russians living in Western countries should be monitored much more than in the past because they are citizens of a nation that leads an aggressive war. I can be sorry for these people, but at the same time when we look back, when the Second World War started, all the Japanese population living in the United States were under a strict monitoring regime as well. That’s simply a cost of war.”

When asked what he meant by the term “monitored”, Pavel said, “under the scrutiny of the security services.”

Ukrainian President Volodymyr Zelensky has also called for Western nations to ban Russian travelers, because the “whole population” of Russia was responsible for the war.

intersect

keyword: SQL reserved word (ANSI, Oracle, z/OS)

interval

keyword: SQL reserved word (z/OS)

interview

“PSA to the kids entering the job market: DO NOT TELL THE INTERVIEWER THAT YOU TAKE THE BUS. SAY YOU HAVE “RELIABLE TRANSPORTATION” AND LEAVE IT AT THAT. DON’T TAKE THE BAIT! It’s how they single out people from disadvantaged backgrounds legally.” —[8-Bit Powwow](#)

into

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

Intolerable Acts

I think a simple way to explain US history is bogus is that the “Intolerable Acts” do not refer to laws of the Congress forcibly removing Native Americans or laws furthering slavery or anything intolerable at all, but British acts to reign in treasonous White men and their profit —[Brett Chapman](#)

invalid

keyword: COBOL reserved word (z/OS)

invoke

keyword: COBOL reserved word (z/OS)

i-o

keyword: COBOL reserved word (z/OS)

i-o-control

keyword: COBOL reserved word (z/OS)

iodine

scientific information:

Iodine is the least reactive of the halogens.

Name: iodine

Symbol: I

Atomic Number: 53

Periodic Table: Group (or family) 17 (old European IUPAC system group VIIB; old American CAS system group VIIA), halogens; Period 5; p-block

Atomic mass: 126.90447(3) g/mol

See: [iodine \(nutritional information\)](#)

iOS

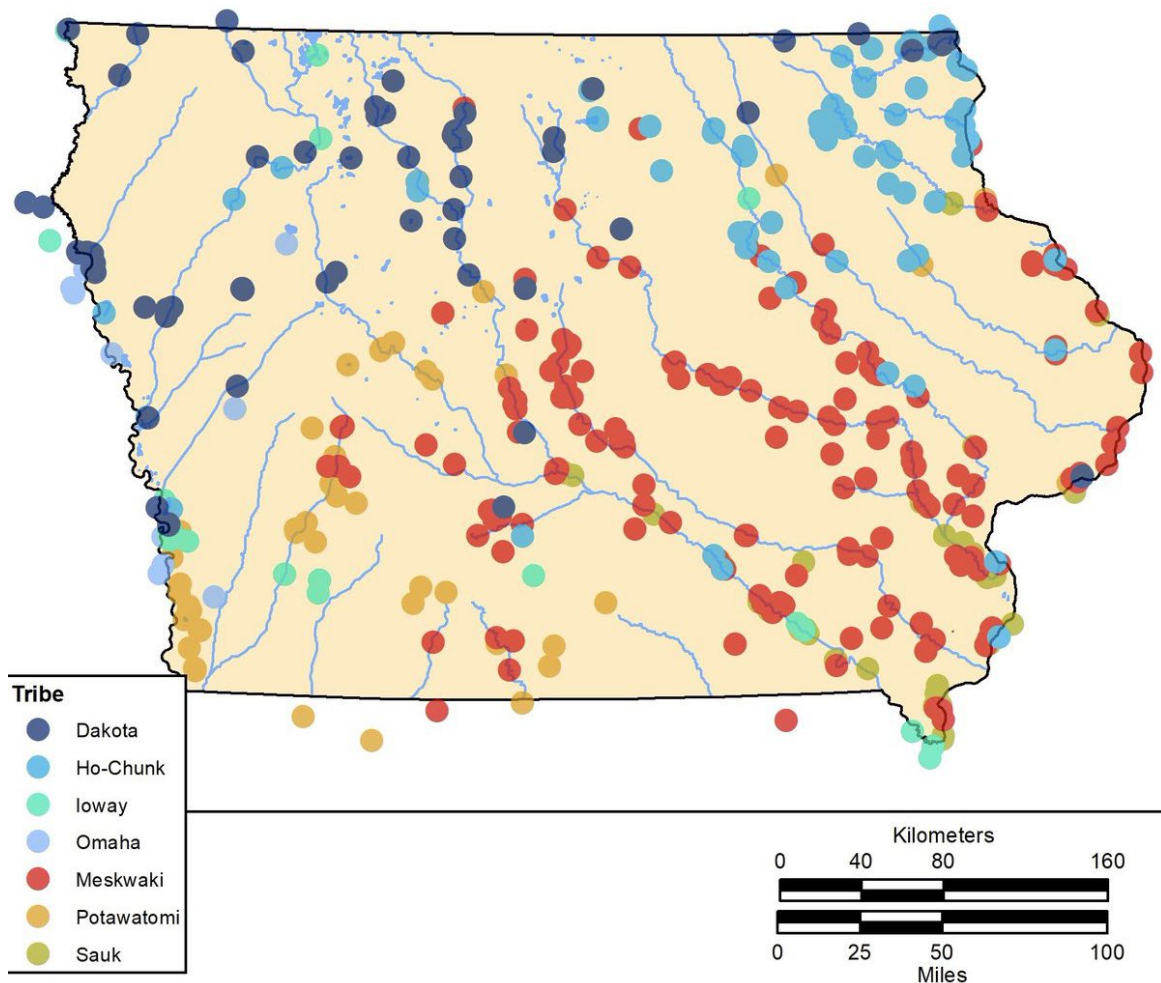
abbreviation

operating system

Proprietary OS by Apple for iPhone and iPod Touch.

Iowa

19 November 2023: “This shows all the communities belonging to Indigenous nations in what became the State of Iowa after the US stole the land from them for the sole purpose of replacing Native Americans with Whites. Hardly a noble experiment yet all celebrate “statehood” and the US flag as good ” —[Brett Chapman](#)



iPad OS

operating system

Proprietary OS by Apple for iPad.

iPhone OS

operating system

Proprietary OS by Apple for iPhone.

iPod (unnamed)

operating system

Unnamed proprietary embedded operating system by Apple for the iPod. —[Wikipedia: List of operating systems](#)

Iran

nation

United States organized a military intervention in the desert of Tabas in central Iran 1980.

18 March 2023: “Holy shit. The former Lt. Governor of Texas Ben Barnes just came forward to say he was part of a secret Republican operation that convinced Iran to keep Americans held hostage in order to sabotage Jimmy Carter’s 1980 presidential campaign.(@peterbakernyt)” —[No Lie with Brian Tyler Cohen](#)

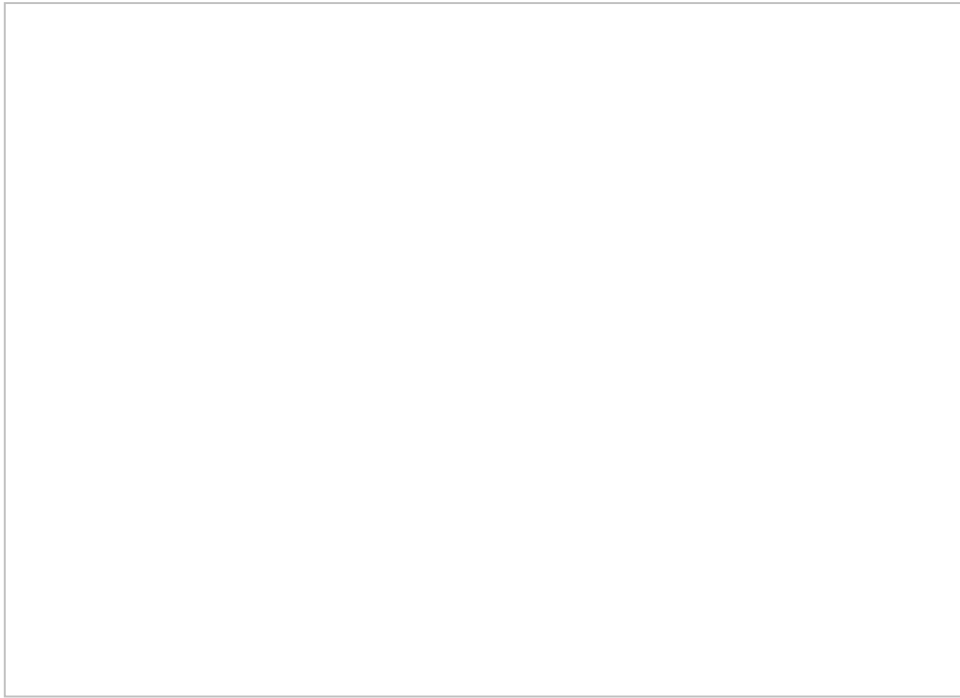
19 March 2023: “Tehran-Riyadh deal can foster regional stability
Iranian FM Spokesman Nasser Kanaani believes that a recent China-brokered deal between Iran and Saudi Arabia to restore relations after seven years can promote stability in the entire region.” —[Iran Foreign Ministry](#); article at [Tehran-Riyadh deal can foster regional stability: Iran FM spokesman](#)

7 August 2023: “Thousands of US troops arrive in Red Sea amid ratcheting Iran tensions
More than 3,000 US sailors and marines aboard two warships have reached the Red Sea, US Navy says.” —[Solidarity](#)

12 August 2023: “IRAN has offered military assistance to MALI and BURKINA FASO” —[Jackson Hinkle](#)

28 December 2023: “I’ve been saying for six months now, hit Iran. They have oil fields out in the open. They have the Revolutionary Guard headquarters you can see from space. Blow it off the map.” —Senator Lindsey Graham in video quoted by [Megatron](#)

29 December 2023: “It’s actually almost cute at this point. He just keeps making up excuses to get the one thing he desperately wants, like “Uh-oh, looks like we’ll have to do that thing I’ve always wanted to do!” He’s like a cartoon breakfast cereal mascot always making new schemes to grab a bowl.” —[Caitlin Johnstone](#)



13 January 2024: “Biden to Iran:
“The US is preparing for war with Yemen”

Reuters wrote today that the President of the United States sent a special message to Iran about the attacks of the Houthis and assured Iran that the United States is fully prepared for war with Yemen.

Today, the US carried out airstrikes on Yemen and the airport in Sana’a for the 3rd time. Damage was minimal because the Houthis had already evacuated and hidden all military equipment and army. And yesterday they again attacked ships connected to Israel without a problem.

Biden quickly learned the lesson that an airstrike against Yemen accomplishes absolutely nothing, it is total nonsense, and all it has accomplished is to completely close the Suez Canal to commercial shipping.

British Defense Minister also sent an empty threats to Iran: Our patience is running out.

The *Telegraph* wrote that British aircraft carriers would not join the war because of a “crisis among military personnel”, probably because the British did not want to go to war in the name of genocidal Israel.

The Houthi forces today released videos of large-scale exercises that prepared them for a war against the United States and Israel.

Major General Mohammad Nasser al-Atafi announced:

“Yemen is ready to deter and respond, and we have the advantage in the Red Sea and Gulf of Aden. As long as the war against our brothers in Gaza continues, we will have many surprises.”

British Independent wrote that all Gulf countries allowed Britain and America to use their

airspace to attack Yemen, except the Sultanate of Oman.

This means that Qatar, the UAE and Saudi Arabia are officially joining the US coalition in the war with Yemen. Aramco will probably be targeted, and US and UK due to the jump in the price of oil, will bring Europe even more into a big financial crisis.” —[Megatron](#)

Iraq

nation

United States invades Iraq (Gulf War: Operation Desert Storm) 1991.

United States invades Iraq (Operation Iraqi Freedom) 2003.

“Taking this son of a taking — Saddam down [is the only way to guarantee Iraq’s disarmament]” —Joe Biden, 1998 Senate hearing, five years before the U.S. invasion of Iraq

19 October 2023: “BREAKING: U.S. Ain Al-Asad air base in Iraq has been hit with drones and missiles.

Explosions were heard inside the base.

This follows threats made by Iran-backed groups in Iraq against U.S forces, signaling the war is slowly spreading beyond the borders of Israel and Gaza.” —[Mario Nawfal](#)



Iraq War

Joe Biden voted in favor of the Iraq War.

iRMX

abbreviation

operating system

Proprietary OS by Intel Corporation

real-time operating system originally created to support the Intel 8080 and 8086 processor families in embedded applications. — [Wikipedia: List of operating systems](#)

iron

scientific information:

Iron is the tenth most abundant element in the universe and makes up about 5% of the Earth's crust.

Name: iron

Symbol: Fe

Atomic Number: 26

Periodic Table: Group (or family) 8 (old European IUPAC system group VIII; old American CAS system group VIII); Period 4; d-block

Atomic mass: 55.854(2) g/mol

See: [iron \(nutritional information\)](#)

IRS

From 29 March 2022: The IRS continues targeting the poorest families for more tax audits during FY 2022. The latest Internal Revenue Service (IRS) statistic covering federal income tax audits through February 2022 reveals that the agency is continuing to target audits on the poorest wage earners. So far it has completed 132,922 audits of these low-income wage earners with less than \$25,000 in total gross receipts. This is up from 105,978 audits IRS had completed a year ago at the end of February 2021.

“Every \$1 we invest in the IRS brings in as much as \$12.50 in revenue by tracking down wealthy tax cheats. It’s ridiculous that Republicans want to cut IRS funding. They’d rather help the ultra-rich get away with tax dodging than help working families.” — [Senator Elizabeth Warren](#) [NOTE: You can see the real numbers directly above, so you know who Senator Warren is really targeting]

is

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

isalnum

function: C string.h library function: stands for IS ALphaNUmeric character

isalpha

function: C string.h library function: stands for IS ALPHAbetic character

isascii

function: C string.h library function: stands for IS ASCII character

isctrl

function: C string.h library function: stands for IS CoNTRoL character

isdigit

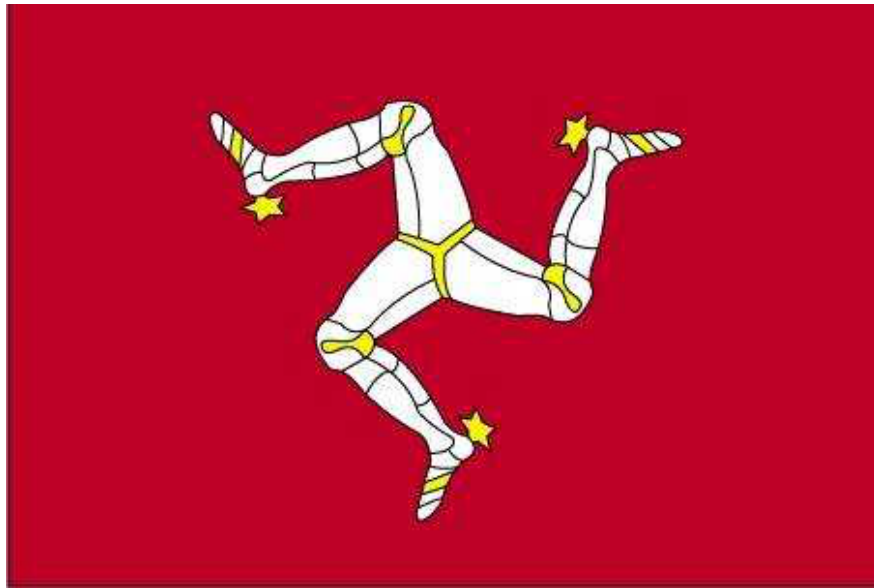
function: C string.h library function: stands for IS DIGIT character

isFinite

keyword: JavaScript method

isle of Man

14 December 2023: “Isle of Man’s flag isred with the Three Legs of Man emblem (triskelion), in the center. The three legs are joined at the thigh and bent at the knee. In order to have the toes pointing clockwise on both sides of the flag, a two-sided emblem is used. The flag is based on the coat of arms of the last recognized Norse King of Mann, MAGNUS III (r. 1252-65); the triskelion has its roots in an early Celtic sun symbol. Inhabited since 6500 BC, the island was influenced by Gaelic culture, settled by the Norse, was part of Scotland, and came under the English Crown in 1399. The island's parliament, the Tynwald, is one of the oldest ruling bodies in the world, possibly dating to the 10th century.” —CIA World Factbook (material that expires after 30 days)



islower

function: C string.h library function: stands for IS LOWERcase character

isprint

function: C string.h library function: stands for IS PRINTable character

ispunct

function: C string.h library function: stands for IS PUNCTuation character

ISIS and ISIS-II

abbreviation

operating system

Proprietary OS by Intel Corporation

“Intel Systems Implementation Supervisor” was an environment for development of software within the Intel microprocessor family in the early 1980s on their Intellec Microcomputer Development System and clones. ISIS-II worked with 8 inch floppy disks and had an editor, cross-assemblers, a linker, an object locator, debugger, compilers for PL/M, a BASIC interpreter, etc. and allowed file management through a console. — [Wikipedia: List of operating systems](#)

isNaN

keyword: JavaScript method

See: .iso — file extension

See: isoleucine

isPrototypeOf

keyword: JavaScript method

Israel

18 July 2023: “We’re taking names.

Alexandria Ocasio-Cortez

Rashida Tlaib

Jamaal Bowman

Summer Lee

Ilhan Omar

Cori Bush

Andre Carson

Delia Ramirez

Ayanna Pressley

These 9 members of Congress believe Israel is racist. We will remember this vote.” — [Nikki Haley](#)

isset()

keyword: PHP reserved word (this is a reserved word and not a function)

isspace

function: C string.h library function: stands for IS whiteSPACE character

isupper

function: C string.h library function: stands for IS UPPERcase character

iterate

keyword: SQL reserved word (z/OS)

itoa

function: C string.h library function: stands for integer TO Ascii

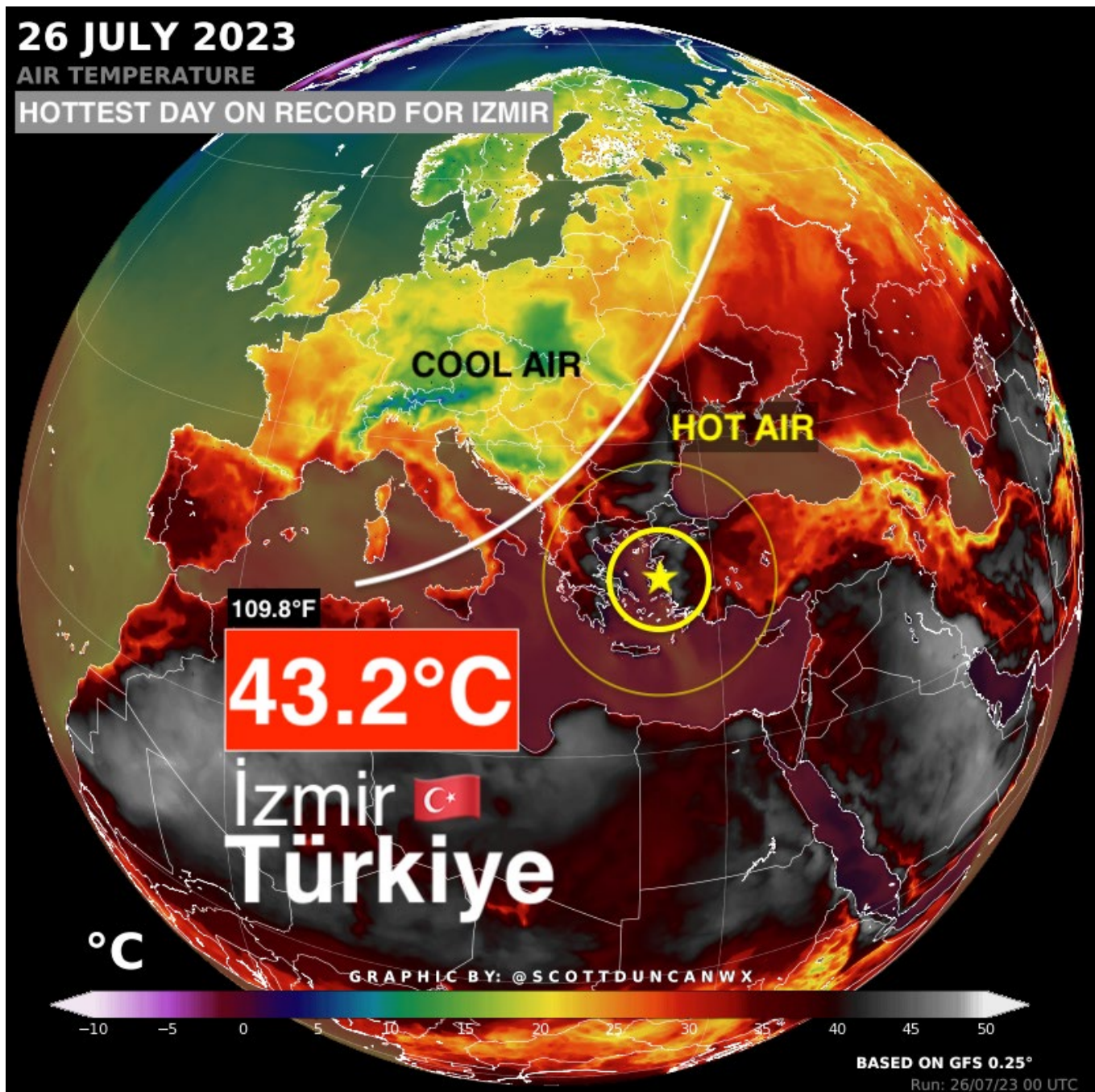
Ivory

keyword: HTML color name

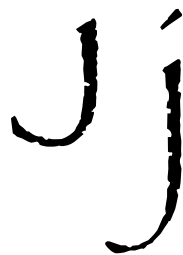
Ivory
#FFFFFF0

Izmir, Turkey

26 July 2023: “BREAKING: Heatwave in Europe spreads east and İzmir in Türkiye just recorded its hottest day on record with 43.2°C air temperature.” —[Scott Duncan](#)



“İzmir is Turkey's 3rd largest city with population over 4.3 million. This beats the old record of +43.0°C from 12 August 2002. You can view the previous record from İzmir [here](#)” —[Scott Duncan](#)

A hand-drawn illustration of the letters 'J' and 'j'. The 'J' is a simple, slightly curved line. The 'j' is a similar line with a small dot above it.**J**

ASCII: 4A hex

UNICODE: LATIN CAPITAL LETTER J

j

ASCII: 6A hex

UNICODE: LATIN SMALL LETTER J

Samuel L. Jackson

“When I see Trump, I see the same rednecks I saw when I was growing up who tried to keep me in my place. That’s what the Republican Party is to me. They’re doing it to young people, gay people. They don’t care who you are. If you’re not them, you’re the enemy.” —Smuel L. Jackson

Lee Jae-myung

1 January 2024: South Korea’s opposition leader, Lee Jae-myung, chairman of the Democratic Party, was stabbed in the neck during a visit to Busan.

January 6th

23 May 2023: “After January 6th, the most hysterical and outraged commentators were asking, “WHY was there not a greater police presence there on that day?!”

Joke’s on you. Now we can say with certainty, federal law enforcement WAS there IN FORCE ... just not to perform the task you’d have had them perform.

THEY -- as law enforcement ALWAYS does during a mass protest --- were largely the ones INCITING the rioting and violence.

Agent provocateurs.

People who call January 6th a “coup attempt” or “an insurrection” are some of the most politically naive and insufferably brainwashed people in America today.

January 6th was a ***psychological operation*** aided and abetted by dozens, maybe hundreds, of undercover federal law enforcement.

This served as yet another pretext for continuing the crackdown on ALL dissent here in America.

Nothing more, nothing less.” —[Frank Lombardi](#)

5 January 2024: [Comrade Jillette](#)



7 January 2024: “January 6th was a protest turned into a riot.
Criminal charges do not include §2383 Rebellion or insurrection.
No one has been charged with insurrection.

(I am on the Left, and I am frustrated by the lies told by our elected officials to manipulate voters)” —[asdf](#)

Criminal charges in Jan. 6 Capitol riot

Approximate number of defendants as of Aug. 4, 2023

Criminal charge	Defendants
Entering or remaining in a restricted federal building or grounds	967
Assaulting, resisting or impeding officers or employees	372
Corruptly obstructing, influencing or impeding an official proceeding or attempting to do so	310
Destruction of government property	64
Theft of government property	51
Conspiracy	42
Assaulting a member of the media or destroying their equipment	11

Data: U.S. Attorney's Office for D.C.; Table: Axios
Visuals

Jacquard machine

programming language

year created: 1804

created by: Joseph Marie Jacquard

predecessors: none (unique language)

Japan

15 August 2023: “US Cements ‘Game-Changing’ Military Ties Between Japan and Australia
A new military pact between #Japan and #Australia came into effect on Sunday that allows the two countries to deploy troops to each other’s territory” — [Antiwar.com](#): Article at [US Cements ‘Game-Changing’ Military Ties Between Japan and Australia](#)

JBS

6 December 2023: “BREAKING: The biggest chicken and tuna companies in the U.S. have been found guilty of price fixing.

Now thousands of people are getting paid with money recovered from the corporations.

The State of Washington is using over \$40 million to send checks to 402,200 households.

Perdue, Tyson, Sanderson Farms, and JBS are colluding to raise chicken prices — up 61% over the last 15 years.” — [More Perfect Union](#)

Karine Jean-Pierre



Karine Jean-Pierre ✓
@PressSec



Investing in America means investing in ALL of America.

When I ran for President, I made a promise that I would leave no part of the country behind.



Karine Jean-Pierre ✓
@PressSec



Investing in America means investing in ALL of America.

When I ran for President, I made a promise that I would leave no part of the country behind.

3:05 PM · 8/15/23 · **31.5K** Views

54 Reposts **44** Quotes **267** Likes **2** Bookmarks

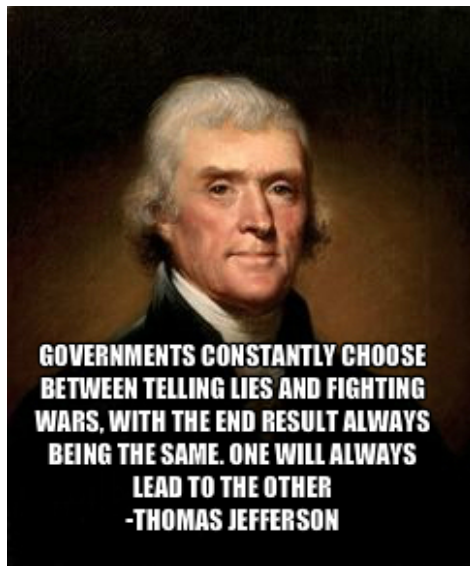


This post has been deleted.

Thomas Jefferson

Thomas Jefferson based the US Declaration of Independence in part on being upset that Britain forbid any more attacks or land grabs against “the merciless Indian Savages” who were

allied with Britain.



“Governments constantly choose between telling lies and fighting wars, with the end result always being the same. One will always lead to the other.” —Thomas Jefferson

Jericho

Jericho, Palestine, is about 11,000 years old.

Jerusalem

Jerusalem, Israel, is about 4,800 years old.

jiffy

A jiffy, defined by Edward R. Harrision, is the time it takes for light to travel one fermi or femtometer, approximately the size of a nucleon. One fermi is 10^{-15} m and one jiffy is about 3×10^{-24} seconds.

job

“It’s strange how unimportant your job is when you’re asking for a raise, but how important it can be when you want to take a day off.” —Earl A. Mathes

Billy Joel

20 September 2023: “Did you know this?

Billy Joel never sells tickets to the front rows of his concerts.

Aside from wanting to beat the scalpers, he got tired of all the bored rich people staring up at him.

“They don’t stand up, make noise, [they just] sit there,” he said.

So now, he sends his road crew out to bring down the fans from the worst seats so they’ll be “people in the front row that are really happy to be there, real fans.”

Although it’s only a small gesture, those people at the front enjoy an experience money can’t buy. Their joy spreads to create a vibrant atmosphere which fills the air and gets into the bloodstream of everybody else in the building.

More artists need to take a leaf out of Billy Joel’s playbook.” —[Call to Activism](#)

jogger

White Sypremacists are using the term “jogger” as a replacement for the N-word. The term is intended as a reference to Ahmaud Arbery, who was jogging in Georgia and was murdered in a White supremacist hate crime. An exmaple would be: “Obama is a jogger.”

Johnson-O’Malley Act

18 July 2023: “My wife enrolled our daughter in Kindergarten and I told her about checking the box for federal aid to Native American students under JohnsonDO’Malley Act because those bastards stole our land and the least they can do is pay for new shoes, crayons and notebook paper every August” —[Brett Chapman](#)

18 July 2023: “This supplements the \$8 she gets every December from the US as pay for the State of Nebraska. An annual pair of shoes, crayons and \$8 for Nebraska—land valued in the billions—is an insult. It makes a mockery of the vast scale of injustice: the ongoing theft of generational wealth.” —[Brett Chapman](#)


Robert Johnson

“Believe in yourself and had confidence that you can compete against all odds. Have a vision of what you’d like to accomplish and be able to articulate that vision.” —Robert Johnson

join

keyword: SQL reserved word (z/OS)

See: .jpeg  v file extension

See: .jpg  — file extension

Mykal Alder June

“You have faced loud, passionate and informed opposition every step of the way, and here we are again. The citizens of Atlanta and the surrounding metro area have taken hours out of their day to come to you, we are here to tell you we do not want this. ... We do not want further militarization of our polic force, we do not want more people murdered in the streets, we do not want these \$33.5 million dollars spent on a facility designed to train police for war against us!” —Mykal Alder June, public comments, Sept 2021, opposing Atlanta’s Cop City

Jupiter

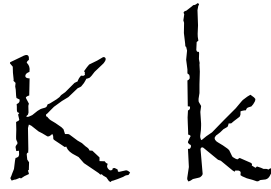
Jupiter is more masive than all the other planets combined.

just

keyword: COBOL reserved word (z/OS)

justified

keyword: COBOL reserved word (z/OS)

Hand-drawn, slightly irregular black letters 'K' and 'k'.**K**

ASCII: 4B hex

UNICODE: LATIN CAPITAL LETTER K

k

ASCII: 6B hex

UNICODE: LATIN SMALL LETTER K

Kailasa temple

“The Kailasa temple in the Ellora Caves, Maharashtra, India is a megalith carved out of one single rock and it is considered one of the most remarkable cave temples in India because of its size, architecture and sculptural treatment.

Most of the excavation of the temple is generally attributed to the VIII century Rashtrakuta king Krishna I (r. c. 756 Ð 773), with some elements completed later.” —[Massimo](#)



kanji

keyword: COBOL reserved word (z/OS)

kannuki

Kannuki (Cross Cinch): A technique used to secure wraps in place, typically in Gote Shibari.

See also: shibari

Karnak

16 December 2023: “Very lucky again to be able to wander around #Karnak this morning before the crowds.

Hot tip: get here by sunrise if you can!” —[Dr. Campbell Price](#)









16 December 2023: “Things at the #Karnak blockyard I don’t think I’d spotted before, no. 1057...

A ‘Beloved King’s Bodily Son’ riding in a chariot under an umbrella!” —[Dr. Campbell Price](#)



Kazakhstan

13 March 2023: “Kazakhstan seized the property of Roscosmos of Russia

The Kazakh authorities seized the property of the main operator of Russian spaceports - the Center for the Operation of Ground-Based Space Infrastructure (TsENKI). A formal reason is a debt of 2 billion rubles.” —[HGiorgi Revushvili](#)

Kemet

“The head of King Userkaf, the first king of the 5th dynasty. The cult of the sun god Ra gained new importance under his reign. He built a new kind of temple dedicated to the cult of the sun at Abusir where this statue was found. Here he is wearing the red crown of Lower Egypt”

—[Natalie Hilder](#)



“Things I hadn’t noticed @EgyptianMuseumC before, no. 961...

The Middle Kingdom box coffin of the chief sailor Nakht (site unknown, JE 36318), where the divine determinative (seen in the name ‘Osiris’) is applied directly to the name the deceased”

—[Dr Campbell Price](#)





“The 12th Dynasty coffin of Nakht-ankh from Deir Rifa, now @McrMuseum, has the determinative of the name of the god Osiris as a ‘sah’ - the same form as the coffin itself, but the identification between the god and the deceased Nakht seems unusually explicit.” —[Dr Campbell Price](#)



“I’d say the A40 determinative is quite common after names of deceased in the Middle Kingdom. I can cite at least 81 instances only on coffins apart from yours (including 51 coming from Asyut just like JE 36318=CG 28128 [Willems S16C])) plus hundreds of objects of other types” —[A. Ilin-Tomich](#)

“Ahh, thanks very much for this - I had no idea!” —[Dr Campbell Price](#)

“It’s quite logical given the tomb owner’s name, when mentioned in the Pyramid/Coffin Texts is ‘Wsjr NN pn’ (as e.g. in our TT 240), just as in the inscribed pyramids of the Old Kingdom” —[Anastasia Stupko-Lubczynska](#)

John Kennedy

Those who make peaceful revolution impossible, make violent revolution inevitable.—John F Kennedy

George F. Kennan

“Were the Soviet Union to sink tomorrow under the waters of the ocean, the American

military-industrial establishment would have to go on, substantially unchanged, until some other adversary could be invented. Anything else would be an unacceptable shock to the American economy.” —George F. Kennan

Robert F Kennedy Jr

Robert F Kennedy Jr. is running for president as a Democrat for 2024.

“In a democracy, the people tell the government what to think, not the other way around.” —Robert F. Kennedy, Jr.

RFK Jr. believes that vaccines (in general, not COVID in specific) cause autism.

25 June 2023: “At the center of Kennedy’s campaign is the promotion of right-wing pseudoscience in relation to the COVID-19 pandemic. For 15 years before the emergence of COVID-19, Kennedy was one of the most prominent promoters of the conspiracy theory that vaccines cause autism. In 2015, he took over the World Mercury Project, renaming it the “Children’s Health Defense” (CHD) in 2018. Since assuming leadership of the organization, Kennedy has transformed it into one of the largest purveyors of vaccine misinformation and “alternative medicine” on the internet.” —[World Socialist Web Site](#) "The far-right politics of Democratic presidential candidate Robert F. Kennedy Jr., by Jacob Crosse

RFK Jr. believes that 5G is mind control.

RFK Jr. believes that SSRIs are the cause of school shootings. He is opposed to gun control.

RFK Jr. is anti-immigration.

RFK Jr. opposes Medicare for All

RFK Jr. is in favor of austerity.

RFK Jr. is supports “free market absolutism”.

He is supports Israel’s apartheid against Palestine.

19 July 2023: “Biden admin extends U.S. habit of interfering in other countries’ domestic politics. Now it’s threatening Israel with the ending of the special relationship between our two nations. As President, my support of Israel will be unconditional.” —[Robert F. Kennedy Jr](#)

Jack Kerouac

“Here’s to the crazy ones, the misfits, the rebels, the trouble makers, the round heads in the square holes, the ones who see things differently. They’re not fond of rules and they have no respect for the status quo. You can quote them, disagree with them, glorify or vilify them, the only thing you can’t do is ignore them because they change things, they push the human race forward and while some may see them as the crazy ones, we see genius because the people who are crazy enough to think they can change the world are the ones who do.” —Jack Kerouac

John Kerry

14 July 2023: “**BREAKING:** US refuses climate reparations for developing nations. During a congressional hearing, US climate envoy @JohnKerry stated that the United States will not pay reparations to developing countries affected by #climatechange-induced disasters.” —[Power Shift Africa](#)

key

keyword: COBOL reserved word (z/OS)

John Maynard Keynes

“Capitalism is the extraordinary belief that the nastiest of men, for the nastiest of motives, will somehow work for the benefit of us all.” —John Maynard Keynes

Khaki

keyword: HTML color name

Khaki
#F0E68C

Chaka Khan

28 December 2023: “Chaka Khan says she’s no longer upset about the sample in Kanye West’s “Through the Wire.”

“if I understood the rap game more completely, like I do now, then that wouldn’t have been a big deal to me ... I’m not hanging on to any silly grudges.” ” —[Rolling Stone](#)

Imran Khan

10 August 2023: “STUNNING: Secret Pakistan cable reveals explicit US pressure to remove democratically elected leader Imran Khan—which immediately followed.

The document cites US frustration at Pakistan’s “aggressively neutral” stance on Ukraine.

It then states that US-Pakistan relations will suffer *unless* Khan is removed by a no confidence vote.

This follows months of the US government repeatedly denying that the meeting took place.” —[System Update](#)

Khan Shatyr

16 December 2023: “Khan Shatyr (Royal Marquee) is a transparent tent-shaped entertainment center located in Astana, Kazakhstan’s capital. Designed in a neo-futurist style, Khan Shatyr was constructed between 2006 and 2010. Beneath the canopy, which covers an area larger than 10 football stadiums, is an urban-scale park, a shopping and entertainment venue with squares and cobbled streets, a boating river, a shopping center, a mini-golf center, and an indoor beach resort. The transparent roofing fabric allows sunlight into the area, moderating its temperature year-round.” —CIA World Factbook (material that expires after 30 days)



kick drum

See: bass drum

Kiffie

6 March 2023: “Would love for you to check out this album. It’s available on CD. And if you’ve already bought it would be great if you could leave a review in bandcamp. It helps hugely.” —[Kiffie](#)

kigurumi

A Japanese term for a costumed character. 着ぐるみ

The most common type is wearing pajama-like animal costumes.

Animegao kigurumi is a type of costumed character and cosplay with an anime mask.

By wearing a body suit and mask, kigurumi cosplayers are able to closer resemble the characters with high accuracy, especially in the case of anime, anthro, or otherwise highly stylised characters. In kigurumi, the performers wear a plastic mask that was created by either molding or 3D printing and a matching flesh-coloured body suit (a zentai suit known as a hadatai). The body suit allows them less-detailed skin features, on the level of animated characters, and the mask allows a similar level of facial features.—[Wikipedia](#)

A quality mask can easily cost \$1,000 to \$2,000. Quality body suits are typically in the range of \$200-\$600.

kigurumi cafe

Kigurumi cafes are operated in Japan, where waitresses are dressed in costume.

kinbaku

Kinbaku, also known as Shibari, is a form of Japanese rope bondage. It's important to understand that Kinbaku is not just about tying knots but is deeply rooted in culture, aesthetics, and communication between the participants.

Martin Luther King, Jr.

“After MLK was assassinated, 110 American Cities started rioting, causing \$47M in damage. On the 6th day of the riots, the Civil Rights Act of 1968 was passed.” —[James Scott](#)

“Our nation was born in genocide—we are perhaps the only nation which tried as a matter of national policy to wipe out its Indigenous population. Indeed, even today we have not permitted ourselves to reject or feel remorse for this shameful episode.” —Martin Luther King Jr

“The evils of capitalism are as real as the evils of militarism and evils of racism.” —Martin Luther King Jr.

“Those who love peace must learn to organize as effectively as those who love war.” —Martin Luther King Jr.

“The problems of racial injustice and economic injustice cannot be solved without a radical redistribution of political and economic power.” —Martin Luther King Jr., *The Three Evils of Society*, 1967

“A riot is the language of the unheard. And what is it American has failed to hear? ... It has failed to hear the promises of freedom and justice have not been met. And it has failed to hear that large segments of white society are more concerned about tranquility and the status quo than about justice and humanity.” —Martin Luther King Jr., *The Other America*, 1967

Where Do We Go from Here?, 1967

“It may be true that morality cannot be legislated, but behavior can be regulated. It may be true that the law cannot change the heart, but it can restrain the heartless. It may be true that the can't make a man love me, but it can restrain him from lynching me, and I think that's pretty important also.” —Martin Luther King Jr., *The Other America*, 1967

“There is nothing new about poverty. What is new, however, is that we now have the resources to get rid of it ... Why should there be hunger and privation in any land, in any city, at any table, when man has the resources and the scientific know-how to provide all mankind with the basic necessities of life? ... There is no deficit in human resources, the deficit is in human will ... The time has come for an all-out world war against poverty.” —Martin Luther King Jr., *Where Do We Go from Here?*, 1967

“There comes a time when one must take a position that is neither safe nor politic nor popular, but he must take it because his conscience tells him it is right.” —Martin Luther King Jr., *A Proper Sense of Priorities*, 6 February 1968, Washington, D.C.

“Let us not seek to satisfy our thirst for freedom by drinking from the cup of bitterness and hatred.” —Martin Luther King Jr.

“The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy.” —Martin Luther King Jr.

January 26, 1956 - Arrested in Montgomery, Alabama boycotting buses. Four days later, on January 30, his home was bombed.

March 22, 1956 - King, Rosa Parks and more than 100 others were arrested on charges of organizing the Montgomery Bus Boycott in protest of Rosa Parks' treatment.

September 3, 1958 - Arrested for "loitering" while attending a friend's arraignment.

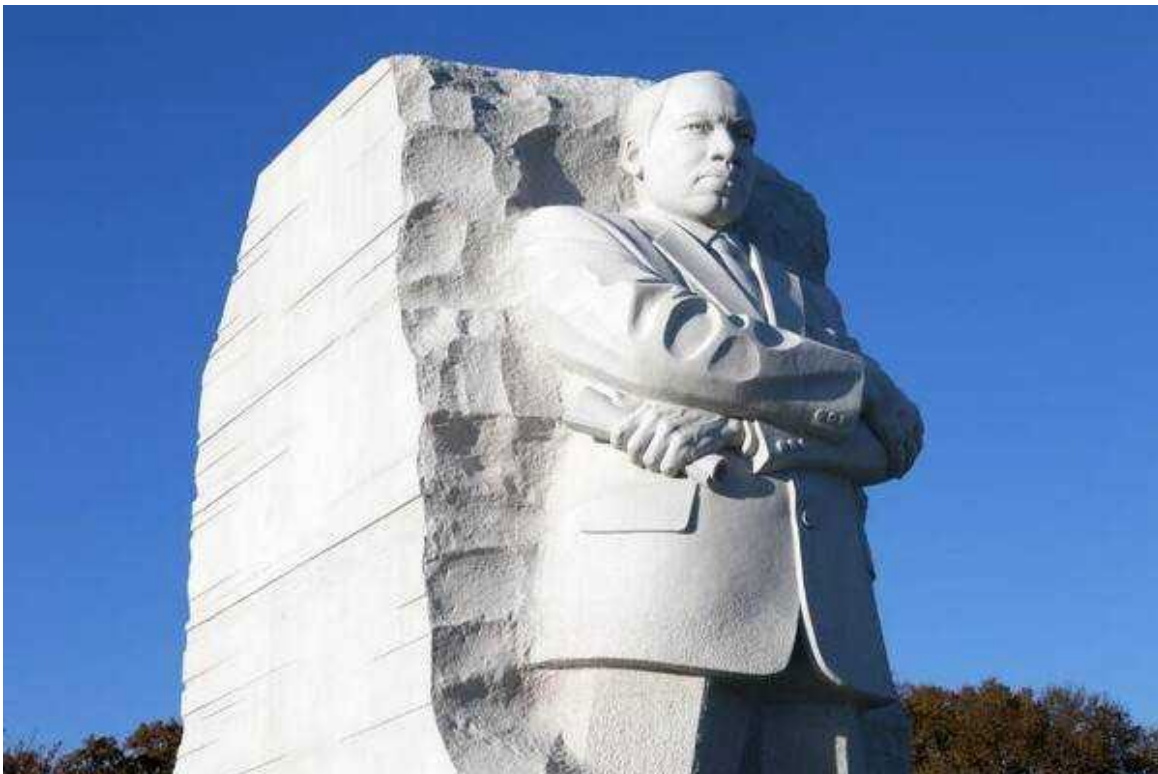
October 19, 1960 - He was arrested in Atlanta, Georgia during a sit-in while waiting to be served at a restaurant. Sentenced to 4 months in jail.

May 4, 1961 - He was arrested in Albany, Georgia for obstructing the sidewalk.

July 27, 1962 - He was arrested and jailed for holding a prayer vigil in Albany, Georgia.

June 11, 1964 - He was arrested for protesting for the integration of public accommodations in St. Augustine, Florida.

15 January 2024: "Each part of the Dr. Martin Luther King, Jr. Memorial has a special significance to the civil rights leader it honors. The monument was dedicated on 28 August 2011, the 48th anniversary of the March on Washington for Jobs and Freedom, and is inscribed with inspiring quotes from Dr. King that highlight his efforts for freedom, justice, and equality through his philosophy of non-violence. The memorial is located at West Potomac Park at 1964 Independence Avenue, S.W., Washington, DC, referencing the year the Civil Rights Act of 1964 became law. It is the first monument to honor an African-American on the National Mall." — CIA World Factbook (material that expires after 30 days)



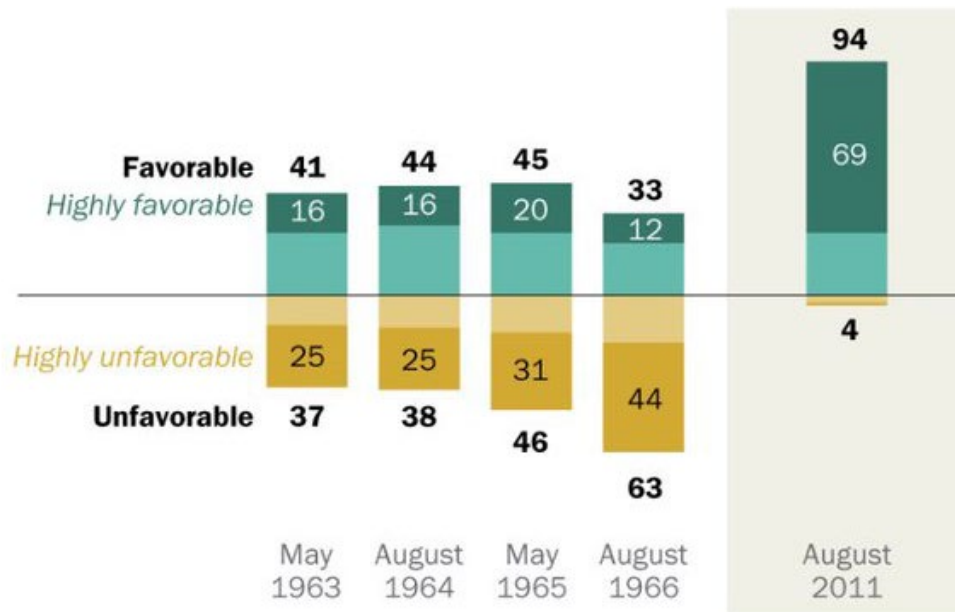
15 January 2024: "The day MLK was killed by the FBI he was more unpopular with white and black Americans than ever before.

Why?

He came out against Vietnam and US imperialism and it got him killed." — [503i7](#)

Americans viewed Martin Luther King Jr. much more positively after his 1968 death than during his life

% of U.S. adults who had a(n) ____ view of Martin Luther King Jr.



Note: Gallup interviewed respondents face-to-face from 1963 to 1966 and by telephone in 2011, with slightly revised question wording.

Source: Gallup surveys of U.S. adults conducted in May 1963, August 1964, May 1965, August 1966 and August 2011.

PEW RESEARCH CENTER

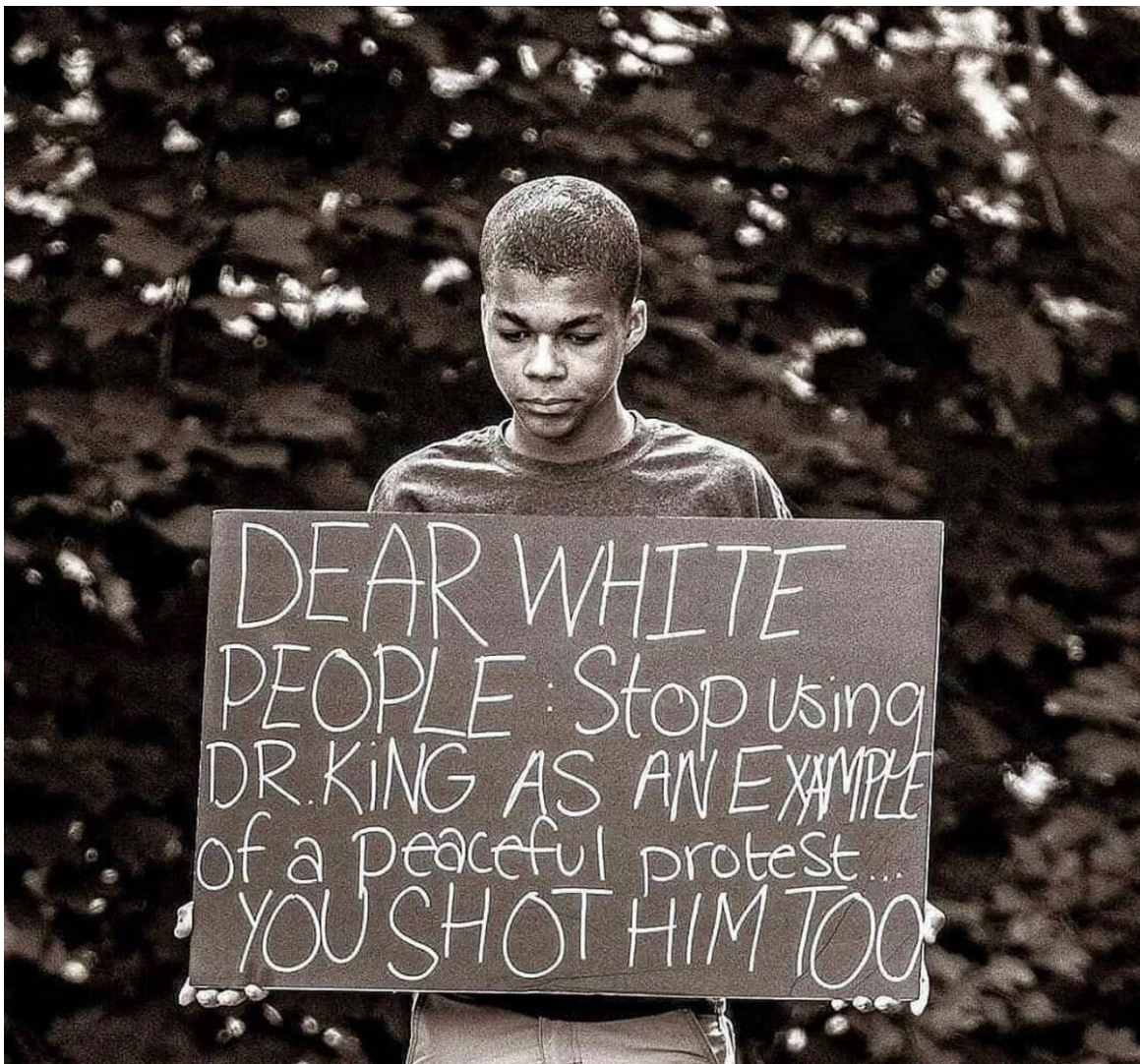


Former Student Non-Violent Coordinating Committee Chairman Stokely Carmichael observed that, in this case, King was taking on not a hapless, wholly unsympathetic villain like Birmingham's Sheriff Eugene "Bull"

Connor, but rather “the entire policy of the United States government.” The consequences were swift and severe: an outraged President Lyndon Johnson cut off all contact with King. And a great number of black Americans—including many old allies and colleagues from the civil rights years—warned that his stance could have devastating consequences for their cause.

King hardly fared better in pursuing his domestic agenda. It was one thing to capture public sympathy nationwide when pitted against the raw hatred and brutality that seemed the peculiar province of whites below the Mason-Dixon Line. It proved quite another to persuade whites outside the South to share their neighborhoods and jobs with blacks, or ~~to support expensive federal~~

15 january 2024: “they’ll pretend they always loved you after they kill you.” —[Imanai Gandy](#)
[\(Orca’s Version\)](#)



Henry Kissinger

Henry Kissinger helped President Richard Nixon derail the Paris Peace Talks, prolonging the Vietnam War, and was involved in the planning and execution of the invasion of Cambodia and Pinochet's coup in Chile.

“Once you’ve been to Cambodia, you’ll never stop wanting to beat Henry Kissinger to death with your bare hands.” —Anthony Bourdain

Kirkuk

Kirkuk, Kirkuk Governorate, is about 4,200 years old.

Klepetan

“The story of Klepetan, the stork who migrated from South Africa to Croatia every year for 20 years to be with Malena, a female stork who couldn’t fly after being shot by a hunter.

Croatia is a popular nesting spot for white storks; some 1,500 nesting pairs reside in the country, with some villages having more storks than people.

Croatian janitor Stjepan Vokić found Malena while fishing in 1993; she had been shot by hunters and was unable to fly. Vokić rescued Malena and became her caretaker.

In 2001, Vokić started to observe a male stork, which he named Klepetan, visiting Malena. Vokić was surprised when he saw the male stork returning the following year and the year after. Every spring Klepetan came back to mate with Malena.

Through a radio tracking band, it was determined that Klepetan made a 13,000-km (8,000Êmi) month-long journey from South Africa to Croatia to meet up with her partner each year.

Vokić took care of their chicks since Malena was not able to hunt, building them a nest, shelter, and feeding them.

Klepetan returned for the last time in April 2021, because on 7 July 2021, Malena died due to old age and natural causes.” —[Massimo](#)



knife

Sharper knives arre safer.

Use your sharpest knife to cut onions.

Do not soak knives for a long time.

Eden Knight

12 Mar 2023, 7:49 am: “Final Message” — [eden knight O_o](#) [a pre-Musk blue check account]

12 March 2023, the final message from Eden Knight, posted at — [twitlonger](#)

Final Message

hi. If you're reading this, I've already killed myself. I have given life every opportunity, I have given myself every chance to get better. But I couldn't do it, I wasn't strong enough, I don't think there was a universe where I was ever strong enough to survive this.

Why?

Sometime in the summer, I was contacted by Michael Pocalyko (Cybersecurity guy) through an IRL friend who claimed he was a ÒfixerÓ and wanted to ÒfixÓ the issue that was between me and my parents. I thought this was impossible, I'm transgender and they are strict conservative Muslims, but I decided I would give it a shot because it can't hurt right lmao?

Over the next couple of months, I had called Michael Pocalyko and his associate Ellen, these calls seemed innocuous and honestly pretty helpful. It was mainly questions about my safety and whether I had my needs met at the place I was staying at. Towards the end of my stay at my friends place, I had witnessed a traumatic event and was already in a bad place mentally, Michael took note of this and decided to push me to leave Georgia and move back to Virginia. Michael and Ellen, along with a Saudi lawyer named Bader met me at the train station. I was taken to a hotel and allowed to experience DC, I genuinely was optimistic and believed this could work. God I wish I wasn't so fucking stupid.

At this point, the only person in that group that I was in contact with was Bader, the Saudi lawyer. Bader, throughout this entire time, in his weird way, tried to get me to detransition. First, he pampered me. He got me an apartment temporarily, he took me out to eat, he took me to therapists, but over time, the more conversations I had with him in person, the more I realized what he was trying to do. He tried to get me to be Ònormal.Ó Gave me examples of feminine men and said that they are transgender but they are hiding it, that it's better to hide it. Told me stories personally about people he knew that successfully hid it. Repeated constantly that I can just hold 2 lives, the female me and the male me. Constantly said I looked like a man, always talked down on my appearance. Bought me masculine clothing and tried to throw away ALL of my

feminine clothing. At every step of the way, he tried to detransition me. I had a breakdown over this and bombarded Michael Pocalyko and Ellen with texts about what was happening, they did not respond. I did not realize fast enough what was happening because I'm fucking stupid.

At a certain point, I realized I was entirely dependent on Bader for food and shelter, and that if I ran away, he could easily find my location, and since I was illegal, I would have just been deported to Saudi. I subconsciously gave up, I was too tired. I did everything he asked, I cut my hair, I stopped taking estrogen, I changed my wardrobe, I met my dad. And then I had another breakdown. My mom kept telling me to repent or I was going to hell, and I did, I repented. I believed I was going to hell so much that I read the entire Quran front to back in a couple of days, crying the entire fucking time about what a disgusting thing I am, and I didn't sleep. I repented, and I was broken. Bader then booked a flight back to Saudi, and I came back.

The first month was fine, okay even. I was on edge the entire time, but I was treated like I was going to run at any second by my family, then came the second month. At this point, I was subjected to daily searches of my belongings, my mom searched all of my electronics whenever she got the chance. I was berated for being a freak when my mom found my private photos, my dad called me a failure and an abomination. I was told that Michael, Ellen, and Bader were actually all specifically hired to get me back and that there was no escape from my situation. I was destroyed, but I wanted to keep going.

After the first time they found my HRT, it was traumatizing, but I didn't want to stop. I didn't want to live if I couldn't transition. Then the second time came. After that, I took a month break off of HRT, and got back on it. They have found my HRT again, and I am done fighting.

I wasn't always a good or even decent person, at times I was a fucking asshole, and a disgusting human being. But there were times I feel like I was good. I don't understand why I was given this life with these circumstances, every day hurts, every second stings. I have tried killing myself in the past, but every single time I was still holding on by a thread somewhere deep inside me, I think that's why I survived them. This time, I am done. I am tired.

Message to the people I love.1:

To my friends, to the people I chose to be my family, to my girlfriend, to everyone who has shown me kindness in this life, I sincerely thank you. You made an unbearable existence bearable at times. I am deeply sorry I have disappointed you all, I wish things were different, I wish this message was a message about how I won, how I escaped and built a successful life. How I managed to get FFS, SRS, and beat my dysphoria. I wish I was speaking to you about how proud I am of myself to have done the impossible. But that's not my reality.

I wish this world wasn't so fucking comically cruel, I am actually laughing writing this sentence. It's unironically ridiculous how bad my luck has been the past couple of weeks. Someone just walked past my car and glanced at me, I wonder if they know I'm gonna kill myself. I wonder what they would think about me if they knew who I actually was.

I wanted to be a leader for people like me, but that wasn't written to happen. I hope that the world gets better for us. I hope our people get old. I hope we get to see our kids grow up to fight for us. I hope for trans rights world wide.

goodbye <3

12 Mar 2023, 4:47 pm: "Cw: suicide A young Saudi trans woman just took her own life. A Heritage Foundation-backed "fixer" introduced her to a man that tried to force her to be cis. He trapped her via her undocumented status until she couldn't take it anymore. #JusticeForEden " —[Eli Erlick](#)

13 March 2023, 7:05 pm: "This is so sad! Someone has to pay! To everyone in the trans community, because stay strong to fight for each other. ♥" —[Rome Bethea](#)

18 March 2023, 3:01 am: "Graffiti in Rockville, Maryland in memory of 23-year old Saudi trans woman Eden Knight.

Eden died after being forcibly detransitioned in Saudi Arabia, after being trafficked from the US by a security contractor named Michael Pocalyko.

Rest in peace Eden

Transphobes will not win" —[Radical Graffiti](#)



Kids Online Safety Act (KOSA)

22 August 2023: “A new bill called the Kids Online Safety Act, or KOSA, is sailing towards passage in the Senate with bipartisan support. Among other things, this bill would give the attorney general of every state, including red states, the right to sue Internet platforms if they allow any content that is deemed harmful to minors. This clause is so vaguely defined that attorneys general can absolutely claim that queer content violates it — and they don’t even need to win these lawsuits in order to prevail. They might not even need to file a lawsuit, in fact. The mere threat of an expensive, grueling legal battle will be enough to make almost every Internet platform begin to scrub anything related to queer people.

The right wing Heritage Foundation [has already stated publicly](#) that the GOP will use this provision to remove any discussions of trans or queer lives from the Internet. They’re salivating over the prospect.

And yep, I did say this bill has bipartisan support. Many Democrats have already signed on as co-sponsors. And President Joe Biden [has urged lawmakers](#) to pass this bill in the strongest possible terms.

If you just want to read a summary of the bill and why it’s so bad, here’s [a link to the EFF](#). Here’s also [a good article in Ars Technica](#).

But here’s [what the bill actually says](#).” — [The Internet Is About to Get a Lot Worse](#) by Charlie Jane Anders

Koch Brothers

“Koch brothers family wealth came from murdering & stealing oil money from Osage Indians of Oklahoma. Largest oil reserve in US discovered under Osage reservation. Conservatorship of Osage oil wealth given to white men, much to Koch brothers, who killed their wards & stole oil \$\$.” —[Matthew Luckey](#)

Konet Imperial Home Entertainment System

“The perfect Christmas present.

KUBA Corporation manufactured the Komet Imperial Home Entertainment System from 1957 to 1962 in Wolfenbuttel, West Germany.

The Komet was the complete Home Entertainment Center for its time. Opening the door of the lower cabinet revealed the rest of its multi-media features.

The early models usually came with a pull-out, 4-speed Telefunken phonograph on the left, and a television tuner in the center which received both UHF and VHF signals, the Telefunken multi-band radio receiver on the right picked up AM, FM, SW and LW frequencies.

KUBA also released models that featured a storage shelf, commonly used as a small bar or to store vinyl record albums, or for an additional charge, you could order a magneto-phone wire recorder. Wire recorders were the forerunners to reel-to-reel and cassette audio recorders.

The top cabinet or “Sail” had eight speakers; six speakers on the top of the sail and two horn speakers pointing forward located beneath the main console.” —[Massimo](#)





—[MissFacto](#)

“KUBA also released models that featured a storage shelf, commonly used as a small bar or to store vinyl record albums, or for an additional charge, you could order a magneto-phone wire recorder. Wire recorders were the forerunners to reel-to-reel and cassette audio recorders.”

—[Beautiful Destinations](#)

South Korea

1 January 2024: South Korea’s opposition leader, Lee Jae-myung, chairman of the Democratic Party, was stabbed in the neck during a visit to Busan.

Kronos (Kronographic OS)

operating system

Proprietary OS by Control Data Corporation.

Peter Kropotkin

The hopeless don't revolt, because revolution is an act of hope.—Peter Kropotkin

Kru

“Here are the Kru people of west Africa [modern day Liberia], they never engaged in the slave trade, they participated in countless slave rebellions. They simply committed suicide whenever they were captured. They preferred death to bondage. Teach your kids about African resistance.” —[Adémóla](#)



kumiho

“The Kumiho (or ‘nine tailed fox’) is a legendary shapeshifting monster from Korean mythology. She can transform into many things, but often appears as a beautiful woman in order to seduce men and eat their livers.

(Image by Harukawa Goshichi, 1776Ð1831)” —[Whores of Yore](#)



“Similar legends are found in China and Japan. This image by Kuniyoshi Utagawa (1797-1861) shows Daji, concubine of King Zhou, being possessed by the 9 tailed fox. Legend has it, the fox then travelled to India and became a concubine of prince Banzoku, causing him to be a brutal ruler” — [Whores of Yore](#)



Kung Fu-tze

The Western name, **Confucius**, was invented by Jesuit missionaries roaming China trying to interfere with the religious beliefs of others. Fu-tze means “master” and Kong is the Chinese

family name. in the 16th century. The Romanized version of the name became popular in the Victorian Era. British citizens started questioning the British Empire. The racist claim was that the White Europeans were a superior race and that all other people (exception being the Jews) bore the mark of Ham. The claim was that the Hamites in their “natural state” were incapable of taking care of themselves and that like a parent to children, the British had a social responsibility to rule the world for everyone else’s benefit. Ordinary British people pointed out the examples of Kung Fu-tze, a great Chinese philosopher, and Imhotep, a great African mathematician and scientist. Imhotep was erased from lesson plans and the Romanized name of Confucius was used to make him sound Greek.

“To know what is right and not to do it is the worst cowardice.” —Kung Fu-tze

Kush

31 December 2023: “Remember, African Kingdom Of Kush was once a global power.

Around 700 BC, two empires ruled the earth: the Assyrian Empire and the Kingdom of Kush. The Kingdom of Kush, also known as the Kingdom of Napata, the Kingdom of Kerma, the Meroitic Kingdom or sometimes called Nubia by some people, was a vast, powerful empire which dominated global affairs such that militarily, politically and economically, it was only rivalled by Assyria. No other power matched these two powers at the period.

Interestingly, at the height of her powers, the kingdom of Kush was ruled by Taharqa, a black African who inherited and consolidated a vast Kushite empire stretching from central Sudan to the Mediterranean, bordering Libya and Palestine: the largest Nile state in ancient times.

Taharqa was so powerful that he named himself “the Lord of the Four Quarters of the World.” Indeed, for some periods, Taharqa was the most powerful ruler, at least of all the ancient African kingdoms.” —[Typical African](#)





L

ASCII: 4C hex

UNICODE: LATIN CAPITAL LETTER L

l

ASCII: 6C hex

UNICODE: LATIN SMALL LETTER L

label

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

labor

“The west is so anti labor that a party can support privatization and still be called “labor”; and a president can break a strike and be FDR. “;Pro labor” is now the vermouth in a dry martini, used to coat the glass of public opinion before getting dumped in the sink.” —[@mousdrvr](#)

17 March 2023: “We are disappointed in you @ossoff.

Your new bill Ð S.874 aka the “Farm Operations Support Act” Ð cuts farm worker wages. It’s the same shameful trick the Trump admin tried, until we stopped them.

Which side are you on?

Georgia is already one of the most brutal states for H-2A workers.

The H-2A visa offers no pathway to citizenship and no employer portability - leaving workers at the mercy of their employers.

Now, @SenOssoff wants to help Republicans cut their wages.

When Donald Trump tried to cut farm worker wages, we stopped him.

@ossoff: how about you come take our jobs? Come work a day in the fields with farm workers & then tell us how much you think they should make.” —[United Farm Workers](#)

18 March 2023: “Guillermo sent us this vid of farmworkers harvesting celery in Oxnard CA. They were literally wading through water almost to their knees to harvest the crop. They did it with good humor, proud of the hard work they do without complaints, so we have food on our tables.” —[United Farm Workers](#) [includes video]

18 March 2023: “Joe Biden stopped a raise in the minimum wage for two years but in five days outlawed RR workers striking over dangers to public safety and in two days gave money to rich people with more than a quarter million dollars in the bank.” —[TSOStheband](#)

18 March 2023: “Federal Reserve goal is to lower wages” —[William Murphy](#) [deleted account]

19 March 2023: “There’s a reason the IWW isn’t in the TUC - and a reason when our members are in a TUC union, are part of these rank-and-file movements to hold the bureaucracy to account!

NHS union members step up campaign to reject platry pay deal” —[London IWW Union](#)

19 March 2023: “19 Mar 1969 the UK Labour govt sent troops to invade Anguilla after locals rebelled against being put under the authority of the St Kitts govt - which hated them. The invaders, expecting to fight mafiosi and Black power activists, found only goats” —[Working Class History](#)

21 March 2023: “Georgia Senator @ossoff introduced a bill to cut farm worker wages. For example: if this bill passed, growers in GA would be able to reduce H2A worker pay by 14%, suppressing wages for entire communities.

Hundreds of millions of dollars would be withheld from farm workers.

The Ossoff-Tillis bill (S.874) reduces the Adverse Effect Wage Rate, the minimum a grower can pay a foreign guest worker— any lower and the wage has an “adverse effect” on GA’s local workers.

The bill makes it cheaper to hire workers who have fewer rights. Trump tried this, too

Are you kidding? Cutting farm worker wages?

@SenOssoff (D-GA) joined forces w/a Republican in introducing legislation that would slash wages for H-2A farm workers.” —[United Farm Workers](#)

In a land where every man’s dream was to pull himself up by his bootstraps, it was clear some boots were made heavier by design. A motley crew of miners, seamstresses, and laborers (who’d

never had the luxury of a silver spoon or even a pewter one) decided they'd had enough of twelve-hour days, measly pay, and the occasional limb lost to machinery.

"Enough's enough!" cried the coal-covered miners.

"We won't be stitched up!" exclaimed the seamstresses, both literally and figuratively.

And so, against the backdrop of smokestacks and bustling streets, the great labor movement unfurled its banners and marched on, like a steamboat against the current, powered by nothing but grit and the hope of a fair wage.

Big Industry, sitting high on its throne of gold coins, scoffed and puffed on its cigars. They hired goons, passed laws, and threw tantrums fit for a king. But the spirit of the workers, like that mischievous Tom Sawyer, just wouldn't stay down.

In the end, after many a tussle, strike, and heartfelt yarn spun 'round campfires, change dawned. The workday shortened, pay got a tad heavier in the pocket, and the children, instead of toiling in factories, took to books and slates. [ChatGPT]

3 February 2024: "Imagine if this happened in a communist country we would never hear the end of it. but because it's in America slavery is fine" — [inhumans of capitalism](#)



lagomorph

“Lagomorphs include hares and rabbits. Rabbits and hares characteristically have long ears, a short tail, and strong hind limbs that provide for a bouncing method of locomotion. They are all are small to medium-sized terrestrial herbivores.” — [Groups of Mammals](#)

Lahaina, Hawai‘i

Land Back: the following should immediately return the stolen lands they have on Maui: Jeff Bezos, Jimmy Buffet, Jim Carrey, David Duffield, Larry Ellison, Mick Fleetwood, Lady Gaga, Bill Gates, Woody Harrelson, Jensen Huang, Barack Obama, Julia Roberts, Lauren Sánchez, Will Smith, Peter Thiel, Steven Tyler, Owen Wilson, Oprah Winfrey



photo used for news purposes

Fresh water began to be diverted from Lahaina in the late 1800s, first to sugar plantations, then to pineapple plantations (pineapple is *not* native to Hawai‘i). Later more water was diverted to resorts and development for wealthy mainlanders. Lahaina changed from a lush wetlands to near desert.

12 August 2023: “Update from a contact that uploaded his video. Folks, this is much worse than you know. Slow playing the death toll. It’s massive. Please just pray for these folks and stay the hell away from the island.” —[Derek Broes](#)

11 August 2023: “BREAKING: Up to 1,000 people [missing] this week from the fire that swept thru the town of Lahaina in Hawaii. Could be one of the worst death events from a wildfire in history.

Not a “natural” disaster. The fingerprints of the fossil fuel industry are all over this ” —[Steven Donziger](#)

12 August 2023: “Native Hawaiians are claiming MSM is greatly underreporting the number of dead. Is anybody even surprised at this point?” —[Limber Maddox](#) [includes video]

13 August 2023: “All the shitlibs are claiming Biden is doing “everything he can” to help. Reports on the ground say otherwise. Besides, “opening up federal aid” is not equivalent to dropping \$24 billion to Ukraine in a moment’s notice. Biden isn’t doing a damn thing. Just like in East Palestine.” —[Dr. Fill](#)

13 August 2023: “There are 93 people (and counting) dead and Lahaina residents cannot even grieve the loss of their loved ones without worrying about big land developers coming in and taking over their Maui town. There is nothing more evil on this earth than Western capitalism and imperialism.” —[Ryan Knight](#)

13 August 2023: “Lahaina residents are worried their Maui town will slip into the hands of affluent outsiders:

“I’m concerned of big land developers coming in & seeing our charred land as an opportunity,” Palalay said.

LEAVE THE PEOPLE OF HAWAII ALONE YOU GREEDY BASTARDS” —[Ryan Knight](#)

13 August 2023: “Lahaina residents worry that rebuilt homes in their Maui town could slip into the hands of affluent outsiders seeking a tropical haven rather than homegrown residents who give the Hawaiian island its spirit and identity.” —[The Associated press](#)

13 August 2023: “Reports suggest 93 people are dead, 1000 people missing still, and 2700 structures destroyed. To consider this an economic opportunity to acquire land for development & profit is beyond the pale. The colonial speculation of disaster capitalism is happening right now in Lāhainā.” —[Uahikea Maile](#)

13 August 2023: President Joe Biden was relaxing on the beach at one of his three mansions in Delaware and a reporter asked, “Mr. President, any comment on the rising death toll in Maui?” Biden, clearly annoyed at having his beach time interrupted, angrily said, “No, No comment.” A different reporter asked, “Will you come talk about the Hawaii response, Mr. President?” Biden got into a car without answering.

The Democrats criticized Trump for his callous response to disasters and disaster victims, but

get upset when someone (Republican, Independent, etc.) points out the same callousness in Biden. The fact of the matter is that the leaders of both parties don't care about common working people, and often have open disdain. The US military, with its huge and growing budget, has no responsibility to help any American. Voting for either Democrats or Republicans won't help. They only care about their billionaire donors. If you want change, volunteer to get Cornel West and the Green Party on the ballot in your state.

14 August 2023: "Hi @Oprah:

We have been made aware that you have 2000 acres of property on Maui.

Please let us know when you plan to use it to help house the Lahaina residents who have been displaced by the fires." —[Ryan Knight](#)

14 August 2023: "The United States military is a few miles away on O'ahu. This is full of leaders and people that somehow did not find themselves worthy of leadership in a moment of disaster. The sirens didn't go off. I heard it that from everyone. There was very little warnign other than seeing smoke and other than seeing flames." —Will Cain

14 August 2023: "I just want people to know - the fires on Maui are heavy on the hearts of people across all islands, this impacts the whole community. We are one community & we stand for each other.

We don't want visitors on any island right now. We're still trying to care for our communities.

The ongoing fights to protect Mauna Kea and for clean water for those affected by Redhill's fuel tanks are ongoing. There are many more efforts being made to reverse the negative impacts of exploitation through colonization (tourism, US companies using our resources, etc.)" —[ren • MĀLAMA MAUI](#)

14 August 2023: "Today we are announcing deliveries of \$200 million worth of arms and equipment for Ukraine. Air defense, anti-armor, and munitions will keep the Ukrainian armed forces in the fight to defend their country's sovereignty, territory, and people." —[Secretary of State Antony Blinken](#)

14 August 2023: "BREAKING: The United States has just sent another \$200 million in aid to Ukraine.

\$200 million to Ukraine today and Maui doesn't even get a comment.

As American citizens in Lahaina, Maui suffer from the loss of life and property President Joe Biden has just sent \$200M worth of artillery rounds, air defense munitions and other weapons to Ukraine.

Nearly 100 people have been confirmed dead in the Maui fires, over 2000 structures have been destroyed and thousands have been displaced.

I hope Biden had a great vacation." —[Collin Rugg](#)

14 August 2023, quoting from the official FEMA web page: "The CNA program can provide eligible survivors with a one-time \$700 payment per household" —[FEMA: Maui Residents](#)

14 August 2023: "Imagine thinking \$700 was something to boast about." —[Peter Daou](#)

14 August 2023 [IMPORTANT NIOTE: vandalism is a crime; I am repeating this as dry humor, not as advocacy]: “A tip for Hawaiians who want to fight against the colonizing land developers soon to arrive on their smoldering shores. Bleach in a gas tank will destroy any machine whether it be a yacht or construction equipment or a car. If bleach is unavailable saltwater should work as well. Also locking gas caps can be broken off with a flathead screwdriver. If there are any remaining mechanics on the island work with them and encourage them to refuse repairs or even actively sabotage these machines” —[Feral](#)

14 August 2023: “The US banned Hawaiian language, overthrew our country, let us die in Maui fires, devastated our universal healthcare, & illegally occupies Hawaii to this day. My mother’s hands were broken for speaking Hawaiian in school. The US is not a beacon, but the destroyer of independence” —[Silver Spook](#)

14 August 2023: “[S]uit alleges Hawaiian Electric Industries ‘chose not to deenergize their power lines during the High Wind Watch & Red Flag Warning conditions for Maui before the Lahaina Fire started,’ despite knowing the risks of sparking a fire in those conditions.” —[Uahioka Maile](#)

15 Aug 2023: “Hawaii governor says state is looking to ‘acquire land’ that was destroyed in fires

On Monday [13 August 2023], Hawaiian governor Josh Green announced that his administration was considering acquiring properties in the seaside resort town of Lahaina that had been destroyed by the recent wildfires.

“I’m already thinking of ways for the state to acquire that land so that we can put it into workforce housing, to put it back into families, or make it open spaces in perpetuity as a memorial to the people who were lost,” Green said while standing amongst the rubble.

“We want this to be something we remember after the pain passes as a magic place. Lahaina will rebuild. The tragedy right now is the loss of life. The buildings can be rebuilt over time, even the banyan tree may survive, but we don’t want this to become a clear space where then people from overseas just come and decide they’re gonna take it. The state will take it and preserve it first.” —[PM](#)

15 August 2023: “I really hope my family can stop sucking Joe Biden’s dick now that they are watching our Hawaiian relatives be left in the ash with no water, electricity, or any government help. That piece of shit is useless. The entire government is fucking useless and I want it to BURN.

And the reason why the US gov does nothing for the Kanaka people is because the only thing Indigenous people could ever do to benefit them is die.” —[Whisper Chanté](#)

15 August 2023: “It’s nice that some of y’all non-Kanaka wanna help but I’ve seen some ‘savior-ish’ comments lately, like, no! You can’t go to Maui rn, essential travel ONLY! That means long-term & monetary donations, we dont need to be saved. Idk if you saw but Hawaiians got Hawaiians! PERIOD” —[Lauele Hōkūlele °.*](#)

15 August 2023: "The Red Cross raised \$500 million for Haiti earthquake relief in 2010, spent 25% on internal administrative costs, built about 6 houses for Haitians and refuses to say what it did with the rest of the money. And Michelle Obama helped lead their fundraising drive." —[Max Blumenthal](#)

17 August 2023: "Capitalism...When a controlled fire is maliciously started, to burn out the working class poor, whom refused to sell their "beach front" homes, which they owned for generations...Imminent domain." —[StephenAnarchist](#)

17 August 2023: "Of course Joe Biden had to be shamed into traveling to Maui. One day earlier he was saying "No comment" with a smile as he was planng his trip to Tahoe. Kudos to all of us on soc media and those in media who put the pressure on Mr. Empatjy to do his job." —[Professor Anthony Zenkus](#)

17 August 2023: "Hawaii's governor Josh Green claims his administration wants to acquire properties in Lahaina to "prevent buyers from swooping in to exploit the tragedy." But the government is controlled by corporate interests so I don't trust him at all. Give the land back to Native Hawaiians." —[Ryan Knight](#)

18 August 2023: "The cruelty of disaster capitalism on full display in Maui:

ÔWe can't get aid yet they are serving evictions.Ó" —[Ryan Knight](#)

The Hawaiian police and courts are evicting people -- people the police refuse to help -- people that the police are blocking from receiving any private aid.

21 August 2023: "Reporter: "How many children are missing?"

Maui Mayor: "I guess we can end this right now, if you want" " —[Owen Gregorian](#) [includes video]

22 August 2023: "Biden's Trip To Hawaii:

1) Greeted with protestors chanting "F*ck you!"

2) Compared the Mail fires that killed over 100 people to almost losing his corvette.

3) [I removed item #3 because it is facutally false]

A vote for Biden is a vote for Blue Trump!" —[Ryan Knight](#)

22 August 2023: "You have to be the biggest piece of shit in the world to compare the Maui fires that killed more than 100 people to almost losing your corvette in a minor house fire that was put out in minutes. That is what Biden just did in Hawaii." —[Ryan Knight](#)

22 August 2023: "The government is disrespecting us once again. FEMA has turned the Hawaii tragedy into a vacation. According to a report and photos obtained by the Daily Mail, FEMA officials booked themselves into 5-star luxury Hawaiian resorts, where they relaxed at cocktail bars, 45 minutes away from Lahaina. They're shacking up beachfront at hotels that go for \$1,000+ a night, filled with all the luxuries you could imagine. While they live in luxury, FEMA's administrator, Deanne Criswell, is complaining they don't have enough money and need more taxpayer cash." —[Jesse Walters](#) [NOTE: this is not an endorsement of this guy's

politics, he happens to be right about this]

22 August 2023: “FEMA officials are staying at \$1,000-a-night luxury hotels in Maui amid recovery efforts in Lahaina.

FEMA officials have been slammed by Maui locals for their slow response to the devastating wildfires that ripped through Lahaina earlier this month

But DailyMail.com can reveal they are staying at three five-star hotels, Fairmont Kea Lani, Four Seasons, and the Grand Wailea Astoria, during recovery efforts

Federal government rates for this week at all three resorts start at an eye-watering \$1,000, company sources revealed

Bungling U.S. government bureaucrats dispatched to the Maui disaster zone are shackled up in \$1,000-a-night luxury hotels on the Hawaiian island, DailyMail.com can reveal.

Officials from the Federal Emergency Management Agency (FEMA) have been slammed by locals over their slow response to the devastating wildfires that have claimed at least 114 lives and left thousands of people homeless after their houses were scorched to the ground.

But that has not stopped the under-fire agency from splashing taxpayer cash to put up more than 1,000 of its personnel at four bank-breaking resorts in Wailea after the deadliest wildfire in the U.S. for more than a century that caused an estimated \$5billion in damage.

The beachside resorts are popular among the rich and famous and located about a 45-minute drive away from the fire-ravaged town of Lahaina.

The posh, five star hotel is a far cry from the shelters and temporary housing where displaced wildfire victims are living after losing their homes in the blaze

FEMA teams have checked in at three five-star hotels, the Fairmont Kea Lani, Four Seasons, and the Grand Wailea Astoria where past guests include members of Hollywood’s elite.

Their rooms carry price tags that are well out of reach of most hard-working Americans.

Federal government rates for this week at all three resorts start at an eye-watering \$1,000, company sources told DailyMail.com.

FEMA’s choice of accommodation for their officials could raise eyebrows given that there are scores of cheaper hotels in the west of the island.

Locals have also fumed over accusations that FEMA has blocked volunteers from delivering aid to the disaster zone.

They blamed U.S. government red tape which means only FEMA-approved supplies can be distributed to those in need.

And Maui’s top emergency official Hernan Andaya resigned suddenly on Thursday citing health problems, just one day after he defended his decision not to sound the island’s alarm system.

Andaya said he did not activate Maui’s 80-alarm, all-hazard outdoor siren system because he feared that residents would confuse the alert for a tsunami warning.” —[Daily Mail](#)

23 August 2023: “This is absolutely sickening. “Those who disobeyed the barricaded road closures during the Maui fires survived the disaster, while many of those who heeded orders to turn around perished in their cars and homes with no way out” -AP” —[Robert W Malone, MD](#)

As of 23 August 2023, the government is still imposing a media blackout and trying to

stop Lahaina natives from getting their message out.

28 August 2023: “Maybe public utilities shouldn’t be for profit operations?

“Hawaiian Electric is facing a dozen lawsuits seeking damages over its alleged role in the fires. Ratings agency Fitch has downgraded the company’s credit to junk, warning that more than \$3.8 billion in ...”

The Hawaiian Electric Company, Inc. (“Hawaiian Electric”), is a subsidiary of Hawaiian Electric Industries, Inc. (NYSE: HE) (“HEI”).

They are attempting to shift liability to the Maui County Fire Department.

[From the Hawaiian Electric press release: A fire at 6:30 a.m. (the “Morning Fire”) appears to have been caused by power lines that fell in high winds.”]” —[davidac](#)

29 August 2023: “I just wanted to say thank you to everybody for your concern and for contacting me. It’s really bad out here. It’s really bad. I don’t know how much is on the media. I haven’t had a minute to look at the media, but people are finding whole families in cars that are just charcoaled and fried. My best friend Michelle, her friend, her brother’s family just ... in the car. They find the car and they find mom and dad in the front seat and the three kids in the back. The other bad thing is that school was out that day that the fire raged through Lahaina so parents were at work and all the kids were at home so there’s massive amounts of children who perished. We’ve been taking supplies. No one’s been sleeping.”

@landback

4 August 2023: “Your “small town” is on Native land/territory.” —[Rhonda LeValdo](#)

land ownership

16 July 2023: “The thing I respect the most about my Ponca, Pawnee and Kiowa ancestors is those people had absolutely no use for “real estate” or personal “ownership” of a square of the planet itself. Deplored the practice as inherently unfair and greedy. They were right. Always will be.” —[Brett Chapman](#)

large capacity magazine

noun “Any ammunition-feeding device with the capacity to accept more than ten rounds, excluding a 22 caliber ammunition feeding tube (Penal Code Section 16740)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California

Commission on Peace Officer Standards and Training]

Larnaca

Larnaca, Cyprus, is about 3,400 years old.

laser pointer

noun “A handheld device capable of projecting a laser light on objects at a distance” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

laser scope

noun “A portable battery-powered device capable of being attached to a firearm and projecting a laser light on objects at a distance” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

La Scala

5 January 2024: “La Scala (Teatro Alla Scala), one of the most-famous theaters in the world, is also known as the “Temple of Opera.” Located in Milan, Italy, the theater was built in 1778 on the former site of the Church of Santa Maria alla Scala, from which it draws its name. Besides its reputation for opera, La Scala is also a leading theater for ballet and has an associate school offering professional training in music, dance, stagecraft, and stage management.” —CIA World Factbook (material that expires after 30 days)



last

keyword: COBOL reserved word (z/OS)

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laundry list

10 December 2023: “A 3200 year old laundry list on a potsherd, with dots presumably indicating the number of garments.

Spotted in the new textile gallery of the National Museum of Egyptian Civilization today”

—[Dr Campbell Price](#)



Lavender

keyword: HTML color name



LavenderBlush

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Lavender Scare

25 July 2023: “Republicans today are trying to revive the “Lavender Scare” of the 1950’s. What’s the “Lavender Scare” you ask?

The “Lavender Scare” refers to a period of LGBTQIA discrimination & persecution in the United States during the mid-20th century. It occurred alongside the more well-known “Red Scare” during the 1950s, when there was heightened fear and suspicion of communism.

During the Lavender Scare, government employees suspected of being LGBTQ+ were targeted and fired from their jobs. Homosexuality was considered a security risk and assumed to make individuals susceptible to blackmail, thus leading to their dismissal from federal agencies. It was a time of widespread discrimination and prejudice against LGBTQ+ individuals in the public and private sectors.

We’re seeing that same hate today among the right all across this country. Everything old is new again. We defeated it before & we’ll defeat it again ” —[LeftwardSwing](#)

DARE

SICK, SICK, SICK?

APRIL 1956

HOMOSEXUAL MENACE: A TRAP FOR YOUR SONS!

25c

Hollywood Boners They'd Like To Forget!

SKELETONS IN THE CLOSET.
Did you know that Katharine Hepburn took a bath in poison? Van Johnson is a homosexual? Hedy Lamarr appeared nude in a movie? George Jessel attempted suicide? Talullah Bankhead was a narcotics addict? Danny Kaye has secret trysts with Princess Margaret? Debra Paget did bumps and grinds? Jimmy

Fidler's wife stabbed Errol Flynn in the ear with a fork?

These are only some of the stories that Hollywood would like to forget. Mention them, or countless others, in the presence of Midland's favorite magazine and they will wince and look at you as though you had put your elbow in the soup. Gone

FILTH IN YOUR FOOD!
Filth is in the food you eat! The pure Food and Drug Administration of the federal government has fined the following name-brand companies because of filth in their products:

Stokely-Van Camp. Worms were found in their corn. 299 cans were seized.

E.G. Whitman & Co. Assorted candy mints contained

fly fragments and were prepared under unsanitary conditions.

Shelby Gum Co., Inc. Beetle fragments, rodent hair and rat excretion were found in bubble gum. The gum was packed without proper sanitary precautions.

Burnham and Morrill Co. Frozen fish handled by them was decomposed. They were fined \$100.

PERVERTS CALLED GOVERNMENT PERIL

Gabrielson, G.O.P. Chief, Says
They Are as Dangerous as Reds

Special to THE NEW YORK TIMES

WASHINGTON, April 18—Guy George Gabrielson, Republican National Chairman, asserted today that "sexual perverts who have infiltrated our Government in recent years" were "perhaps as dangerous as the actual Communists."

He elevated what he called the "homosexual angle" to the national political level in his first news letter of 1950, addressed to about 7,000 party workers.

INQUIRY BY SENATE ON PERVERTS ASKED

Hill and Wherry Study Hearings
There Are 3,500 Deviates in
Government Agencies

By WILLIAM S. WHITE

Special to THE NEW YORK TIMES.

WASHINGTON, May 19—

Senate investigation of alleged homosexuals in the Executive Branch of the Government was recommended unanimously today by a Senate Appropriation subcommittee of ten members.

Perverts are described by intelligence officers as poor security risks because of their vulnerability to blackmail.

The inquiry was proposed on the

OUST 119 MORE SEX PERVERTS IN STATE DEPT.

House Member Suggests
Widened Drive

[Chicago Tribune Press Service]

Washington, March 25—An additional 119 homosexuals were released by the state department during 1951, a house appropriations committee report disclosed

brought to 271 the total of state department homosexuals or permitted to re-enter in 1948. Ninety-one were on the payroll in 1949, 54 in 1950 and 47 in 1951.

BEGIN PURGING STATE DEPT. OF HOMOSEXUALS

By WILLIAM MOORE

[Chicago Tribune Press Service]

Washington, April 20—A senate appropriations subcommittee today began the task of ridding the state department of homosexuals, subversives, wasters, and propagandists for international causes.

The subcommittee



law

There is an inherent conflict of interest in a lawyer who is paid by the defendant's adversary, the government.

Public defenders only care about rapidly processing as many plea bargains as possible to make the court system wrongfully imprison innocent people as fast as possible.

LawnGreen

keyword: HTML color name



leaded cane

noun “A staff, crutch, stick, rod, pole, or similar device unnaturally weighted with lead (Penal Code Section 16760)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

leading

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leave

keyword: SQL reserved word (z/OS)

Hypatia Lee

10 October 2023: “The grandfathers were natural rock formations that were said to show that the Creator gave this land to us because the grandfathers looked Native. So the colonizers defaced it and made Mount Rushmore.” — [Hyapatia Lee](#)

left

“Liberals are NOT the Left.
The Left is Socialists and Communists.” — [Stephanie Voltolin](#)

left

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LemonChiffon

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#FFFACD

length

keyword: COBOL reserved word (z/OS)

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Vladimir Lenin

“Freedom in capitalist society always remains about the same as it was in ancient Greek republics: Freedom for slave owners.” —Vladimir Lenin

“When one makes a Revolution, one cannot mark time; one must always go forward - or go back. He who now talks about the ‘freedom of the press’ goes backward, and halts our headlong course towards Socialism.” —Vladimir Lenin

“Democracy is indispensable to socialism.” —Vladimir Lenin

“The only way to save the world is through socialism, but a socialism that exists within a democracy; there’s no dictatorship here.” —Hugo Chavez

King Leopold

“The world hates Hitler because Hitler unleashed violence on Europe- the violence Europe reserved for Africans. Leopold committed worse crimes than Hitler but many people don’t even know his name.” —[Adémólá](#)

“King Leopold used to chop off the hands of Congolese people when they don’t meet up to the daily quota of rubber during the colonial period. Today, there are hand-chocolate candies in Belgium celebrating Leopold.” —[Adémólá](#)

less

keyword: COBOL reserved word (z/OS)

lesseq

keyword: SQL reserved word (z/OS)

lesser of two evils

“There’s a terrible danger in voting for the lesser of two evils because the parties can set it up

that way.” —Hunter S. Thompson

“‘That’s the real issue this time,’ he said. ‘Beating Nixon. It’s hard to even guess how much damage those bastards will do if they get in for another four years.’

“The argument was familiar. I had even made it myself, here and there, but I was beginning to sense something very depressing about it. How many more of these goddamn elections are we going to have to write off as lame, but ‘regrettably necessary’ holding actions? And how many more of these stinking double-downer sideshows will we have to go through before we can get ourselves straight enough to put together some kind of national election that will give me and the at least 20 million people I tend to agree with a chance to vote for something, instead of always being faced with that old familiar choice between the lesser of two evils?

“Now with another one of these big bogus showdowns looming down on us, I can already pick up the stench of another bummer. I understand, along with a lot of other people, that the big thing this year is Beating Nixon. But that was also the big thing, as I recall, twelve years ago in 1960 — and as far back as I can tell, we’ve gone from bad to worse to rotten since then, and the outlook is for more of the same.” —Hunter S. Thompson, 1972

“Joe Biden is proof that “lesser evilism” is a failed strategy and just results in more evil ”
—[Birrior](#)

let

keyword: JavaScript reserved word

See: leucine

level

keyword: SQL reserved word (ANSI, Oracle)

LGBTQ

12 Mar 2023, 7:49 am: “Final Message ” —[eden knight O_o](#) [a pre-Musk blue check account]

12 Mar 2023, 4:47 pm: “Cw: suicide A young Saudi trans woman just took her own life. A

Heritage Foundation-backed “fixer” introduced her to a man that tried to force her to be cis. He trapped her via her undocumented status until she couldn’t take it anymore. #JusticeForEden ” —[Eli Erlick](#)

13 March 2023, 7:05 pm: “This is so sad! Someone has to pay! To everyone in the trans community, because stay strong to fight for each other. ♥” —[Rome Bethea](#)

18 March 2023, 3:01 am: “Graffiti in Rockville, Maryland in memory of 23-year old Saudi trans woman Eden Knight.

Eden died after being forcibly detransitioned in Saudi Arabia, after being trafficked from the US by a security contractor named Michael Pocalyko.

Rest in peace Eden

Transphobes will not win” —[Radical Graffiti](#)



See: Eden Knight

18 March 2023, 11:25 pm: “Overwhelming majority of Brits would reject cruel US-style drag bans, survey finds” —[PinkNews](#)



11 August 2023: “The Biden administration just granted a religious exemption to Baylor University students and staff to be able to sexually harass LGBTQ students. Yes, you read that right. This is insanity.

So much for having our backs.” — [Alejandra Caraballo](#)

See: .lib — file extension

Liberia

nation

“Former president of Liberia Charles King holds the Guinness world record for the most fraudulent election ever having won the 1927 election with 234,000 votes in a country of 15,000 registered voters.” — [Typical African](#)

library

keyword: VHDL reserved key word

Libya

nation

United States air strike against Libya 1986.

United States air strike against Libya 2011.

19 March 2023: “12 years ago today, NATO claimed they were invading Libya for “humanitarian” purposes—turning a country that had the highesty satndard of living in Africa into a war-torn, failed state with open-air slave markets.

0 sanctions, 0 ICC arrest warrants” —[sarah](#)

LIBYA UNDER GADDAFI

- Health care, education and electricity
- Virtually no homelessness or illiteracy
- Interest free loans
- Citizens received percentage of all oil sales
- Backed a Pan-African gold-backed currency

LIBYA AFTER GADDAFI

- Open-air slave trade
- Civil war
- Refugees flood Europe
- Eruption of extreme violence and destabilization



12 August 2023: “Libya under Gaddafi used to have a higher GDP (PPP) per capita than the EU, and in some periods higher than the US. Remaking of the economy was parallel with the

attempt to remold political and social institutions.” —[Ariana Wells](#)

12 August 2023: “12 years ago the West attacked Libya the richest country in Africa, and murdered their President with little pushback even from Africa

Now they fear attacking a poor country like Niger, and have to try to get African countries they control to do it

Their power has diminished” —[Black in the Empire](#)

12 August 2023: “Reminder

It wasn't Trump that was involved in going into Africa, destroying the country of Libya, murdering their President, and creating a State controlled by terrorists that had open slave trading

It was Obama and Hillary

Hillary was proud of it and thought it was hilarious” —[Black in the Empire](#)

15 August 2023: “Libyans no longer have access to free healthcare, free education, good roads, they no longer control their politics and their oil. All the infrastructures built over 40 years was bombed to the ground by NATO. But we're told NATO bombed Libya on humanitarian grounds.” —[Adémólá](#)

14 September 2023: “YES, NATO CAUSED THE PRESENT DISASTER IN LIBYA

Here's a timeline of what really happened.

In March of 2011, US intelligence claimed there was a popular uprising in Libya and asked the UN to okay a temporary no-fly zone over Libya to protect the citizens.

China, India, Brazil, Germany and Russia, declined to vote for this. China called for peaceful dialogue instead. The Russians warned that the US would unilaterally turn this into one of their regime-change operations.

The US denied they would do such a thing, and said this was only about protecting civilians.

But the Russians turned out to be precisely right—a NATO bombardment was launched that lasted eight months until Gaddafi was killed in late October. As soon as he was dead, NATO ceased fighting: Oct 31.

A US academic study later said that NATO's intervention likely extended the length of the war by up to six months—and amplified to an astonishing degree the damage to the country, which was left in ruins.

I think the most interesting comments at the time came from Italy's leader Silvio Berlusconi. He felt Italy had no choice but to support the NATO attack, but added that he had to tell the truth. “This wasn't a popular uprising,” he said. “Gaddafi was loved by his people.”

Three observations:

First, it is undeniable that the chaos created by NATO's 7,000 bombing raids wrecked Libya and was the direct cause of that community being so badly devastated by the storm that hit it recently.

Second, it is horrific (but not surprising) that the Guardian, CNN, and so many other media are deliberately hiding this truth from their audiences.

And third, we need to notice who actually got it right in 2011: China, India, the Russians, and Brazil.

Yep.

The nascent BRICs, before they were the BRICs.

This should leave no one in any doubt that loss of US hegemony will only be a good thing for the world.

There's something truly horrifying about the world's richest countries destroying an African nation and then, more than a decade later, the world's media hiding the truth in such tragic circumstances.” —[Nury Vittachi](#)

16 September 2023: “Barack Obama Belongs In A Fucking Cage

The Twitter account of America's 44th president just casually shared some links to organizations providing relief to the victims of the terrible flooding in Libya, which as of this writing has already killed thousands of people.

And that would of course be a fine and normal thing for America's 44th president to do — had America's 44th president not personally played a massive role in paving the way to the devastation we're seeing in Libya today.

“If you're looking to help people impacted by the floods in Libya, check out these organizations providing relief,” Obama tweeted.

Uhh, excuse me? Sir? You know you're literally Barack Obama, right?

In 2010 the oil-rich Libya ranked higher on the UN Human Development Index than any other nation in Africa, with much better national infrastructure to protect itself from floods and other natural disasters. Today Libya is a chaotic humanitarian disaster where UN-backed investigators now say literal crimes against humanity have been taking place, including women being forced into sexual slavery.

What changed? If you're reading this, you probably already know what changed.

In 2011, US, French and British forces helped rebels with extensive links to Al Qaeda kill Libya's longtime leader Muammar Gaddafi, which immediately plunged the nation into violence, chaos, extremism and instability which persists to this day. It was later revealed that NATO powers knew they were backing murderous Al Qaeda-linked jihadists at the time.

Falsely branded a “humanitarian intervention” designed to prevent alleged plans for genocide and Viagra-fueled mass rapes against peaceful protesters by Gaddafi's troops, the NATO attack on Libya quickly morphed into a regime change operation which saw Gaddafi brutally lynched in the streets and dying after being stabbed in the anus with a bayonet. Years later in 2016 a UK House of Commons Foreign Affairs Committee found that the narratives used to justify the intervention in Libya were “not supported by the available evidence.”

“We have seen no evidence that the UK Government carried out a proper analysis of the nature of the rebellion in Libya,” the report reads. “UK strategy was founded on erroneous assumptions and an incomplete understanding of the evidence.”

This confirmed concerns voiced by Amnesty International and a UN human rights investigator months before Gaddafi's death that the evidence for the alleged atrocities the intervention was meant to prevent simply wasn't there to be found. Because no policy changes were made after the Iraq invasion and nobody was ever punished for inflicting that horror upon our world, no lessons were learned, and it happened again. The west was deceived into yet another disastrous military intervention, which continues to have severe consequences for people in the region to this day.

In an article published earlier this month in Responsible Statecraft about the crisis in Niger, Branko Marcetic made the interesting observation that the Nigerien junta which ousted the previous government has explicitly stated that the coup was necessary because of the “continuous deterioration of the security situation” which Niger and other countries in the Sahel have been suffering from for over a decade due to “the negative socioeconomic, security, political and humanitarian consequences of NAT’s hazardous adventure in Libya.”

Marcetic also notes that the regime change intervention in Libya was meant to segue into a regime change intervention in Syria by the same means:

“Sens. John McCain (R-Ariz.), Joe Lieberman (I-Conn.), and John Kerry (D-Mass.) all called for a no-fly zone. ‘love the military ... but they always seem to find reasons why you can’t do something rather than why you can,’ complained McCain. The American Enterprise Institute’s Danielle Pletka said it would be ‘an important humanitarian step.’ The now-defunct Foreign Policy Initiative (FPI) think tank gathered a who’s who of neoconservatives to repeatedly urge the same. In a letter to then-President Barack Obama, they quoted back Obama’s Nobel Peace Prize speech in which he argued that ‘inaction tears at our conscience and can lead to more costly intervention later.’

“Then-Secretary of State Hillary Clinton, reportedly instrumental in persuading Obama to act, was herself swayed by similar arguments. Friend and unofficial adviser Sidney Blumenthal assured her that, once Gaddafi fell, ‘limited but targeted military support from the West combined with an identifiable rebellion’ could become a new model for toppling Middle Eastern dictators. Pointing to the similar, deteriorating situation in Syria, Blumenthal claimed that ‘the most important event that could alter the Syrian equation would be the fall of Gaddafi, providing an example of a successful rebellion.’ ”

And that’s exactly what the Obama administration set out to do: pouring weapons into Syria with the goal of effecting regime change, once again on the side of Al Qaeda-linked fighters. Had Russia not intervened in 2015 to prevent Damascus from being toppled, Syria would likely have suffered the same fate as Libya.

So that’s two countries Obama and his cohorts tossed in the incinerator back-to-back, in much the same way the previous administration torched Afghanistan and Iraq. It was done a bit more slyly and subtly than the overt Hulk Smash ground invasions of the Bush era, but the death, suffering and destabilization caused by Obama’s depravity have been just as real.

This is as clear as day, and yet we still get imperial propaganda outlets like *The Washington Post* telling us that “everyone” is to blame for Libya’s current troubles. WaPo has a new article out titled “Libya’s catastrophe is everyone’s fault,” which is a bit like Charles Manson saying the Manson Family killings were everyone’s fault. The article’s author Ishaan Tharoor lays the blame for Libya’s inability to adequately protect its people from the flood on “Libya’s feuding factions and fractured polity” as well as other nations in the region before conceding that NATO’s toppling of Gaddafi would have also played some role.

Another *Washington Post* article titled “How a decade of conflict and division put Libya in peril of disaster” lays zero blame at all on Obama and NATO powers for the nation’s suffering, saying only that Gaddafi was a brutal dictator who “was killed by rebel forces during a NATO-backed Arab Spring uprising.” But it does acknowledge that Libyans are now dying because the nation’s infrastructure has been in a state of decay since 2011:

“The country, with terrain ranging across desert and coastal communities, is highly vulnerable to human-induced climate change. But improvements to and maintenance of basic services and infrastructure, such as the country’s networks of dams, has been deprioritized, said Mary Fitzgerald, a Libya expert at the Middle East Institute, a Washington think tank.

“‘Between 2011 and 2014, there were already concerns about the state of Libyan infrastructure,’ Fitzgerald said. ‘And then Libya went through a six-year civil conflict from 2014 to 2020 and a lot of infrastructure was damaged during that conflict. In the three years since, you have a situation of rival government, which has yet again complicated political dynamics.’”

This nation has been in a continuous state of strife, violence and suffering since the United States spearheaded a NATO campaign to smash it to pieces. And yet you’ll still get empire simps telling you that NATO is a “defensive alliance”, and you’ll still get liberals saying that Obama’s worst scandal was wearing a tan suit one time.

Barack Obama belongs in a fucking cage. His crimes are utterly unforgivable, and if the law existed to punish the world’s worst criminals instead of to protect them he would be rotting in a maximum security prison cell.

It’s all well and good that people are sending Libya aid and that the call to do so is being amplified by influential voices. But the fact that the 44th president of the United States can just come out and pretend to support a nation he personally helped destroy without being called out and excoriated by the mass media shows that we live in a world which is dominated by lies and propaganda.” —[Caitlin Johnstone](#)

license plates

On 17 May 1993 “the Sac and Fox Nation defeated Oklahoma in SCOTUS in a case involving the sovereign right of an Indigineous nation to issue license plates for vehicles registered by its citizens. The case was Oklahoma Tax Commission v. Sac and Fox Natiojn, 508 U.S. 114—huge win.” —[Brett Chapman](#).

“When I went to law school my Indigneous professor Bill Rice was my favoritel. Turns out this all began with Bill driving around the streets with a Sac and Fox Nation leader with a tribal tag trying to get a ticket. They did. The rest oiis historyl Took it all the way up. Great man.” —[Brett Chapman](#).

“Thinking of a law professor I had nmed Bill Rice, a Keetoowah. I took his Native American law classes. First day, first one, he says ‘I knew your grandpa from drafting the Pawnee Constitution.’ ” —[Brett Chapman](#).



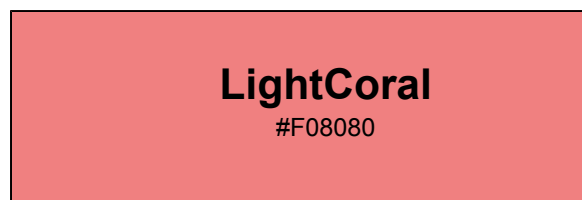
LightBlue

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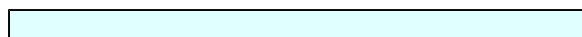
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LightCyan

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LightGoldenRodYellow

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LightGray

keyword: HTML color name

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LightGreen

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lightings stands

11 December 2023: “Equipment tip

Don’t use light monitor stands.

They will vibrate and add muddiness to your sound, acting like a passive speaker.

(Furniture vibrations transform to sound just like speaker vibrations, but imagine the quality of it)

Use stands that are really heavy. Those usually can fit some heavy material inside. Often sand is used.

You can see their rectangle form, which is allowing to fill them with something.

You can make DIY stands from a few pieces of wood and fill it with sand

This will be cheaper and infinitely better than those cheapest “singing” stands.

Hard construction will prevent unnecessary vibrations and keep your sound much more clean.

This is really important as it affects the upper bass - low midrange area, that is crucial to monitor well for achieving a great mix.

Using monitors on the table is a very compromise solution (unless itÖs an additional control). Good stands are much better.” — [Nathaneil W.](#)

LightPink

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LightPink

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LightSalmon

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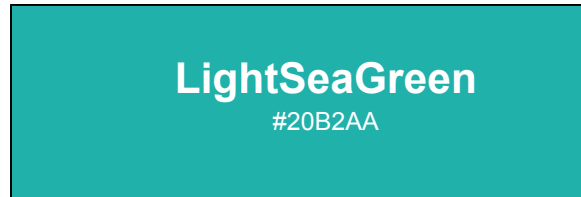
LightSalmon

#FFA07A



LightSeaGreen

keyword: HTML color name



LightSkyBlue

keyword: HTML color name



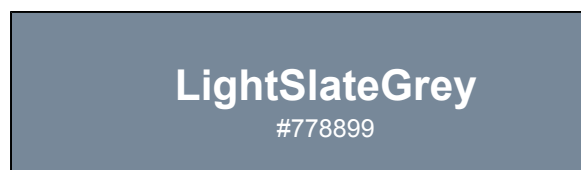
LightSlateGray

keyword: HTML color name



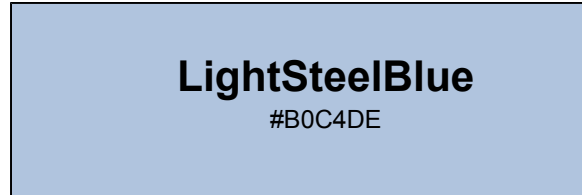
LightSlateGrey

keyword: HTML color name



LightSteelBlue

keyword: HTML color name



LightYellow

keyword: HTML color name



like

keyword: SQL reserved word (ANSI, Oracle, z/OS)

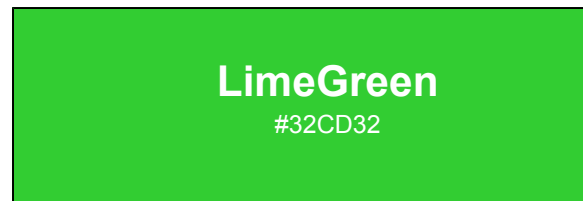
Lime

keyword: HTML color name



LimeGreen

keyword: HTML color name



limit

keyword: COBOL reserved word (z/OS)

limited

keyword: Ada reserved key word

limiter

4 December 2023: “Clipper vs Limiter

- What is the difference?
- When used?
- Soft Clipper vs Hard Clipper

A clipper and a limiter are both audio processing tools, but they serve different purposes.

A clipper is designed to intentionally clip or distort the audio signal, adding harmonics and altering the waveform.

❗ It's often used creatively for distortion effects.

A limiter is used to prevent the audio signal from exceeding a specified threshold, controlling the dynamic range and avoiding distortion.

It's commonly used in mastering to ensure that the overall loudness remains consistent without clipping.

Use a clipper for intentional distortion or creative effects, while a limiter is for controlling peaks and maintaining a balanced audio output.

~~~~~

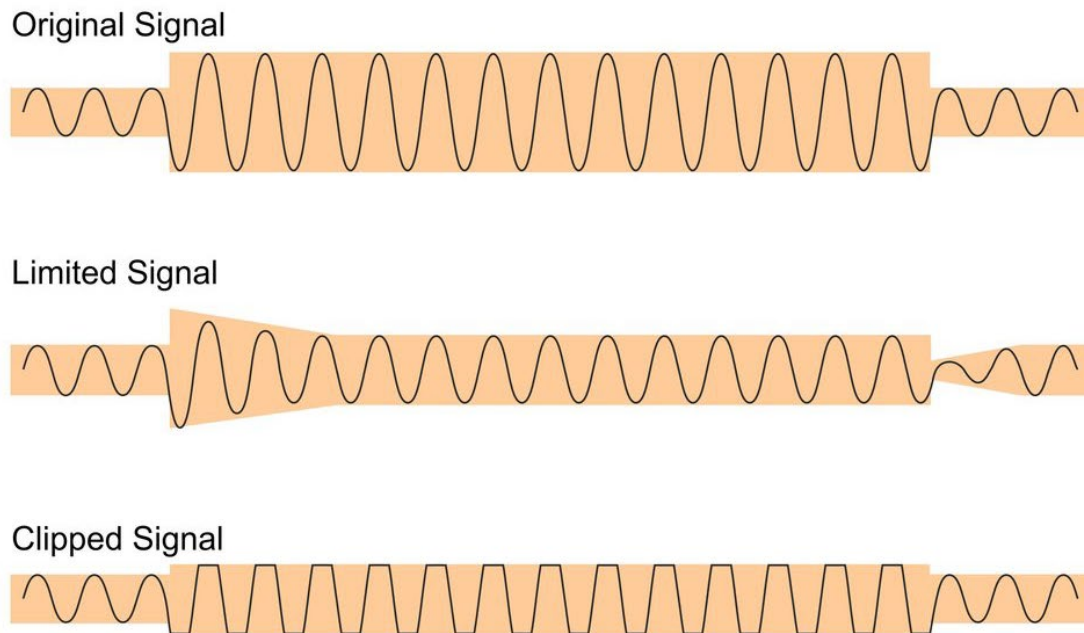
Soft Clipper vs Hard Clipper

☑ A soft clipper introduces gradual distortion, rounding off the waveform peaks, resulting in a smoother sound.

It tends to preserve more of the original tone while adding a subtle edge.

☑ A hard clipper creates a more aggressive, gritty distortion with sharper cutoffs, often

producing a harsher and more noticeable distortion effect, suitable for certain genres or creative audio applications.” —[Nathanael W.](#)



4 December 2023: “In my process limiters are not for maintaining a balanced audio output. That’s what the volume faders and gain stage is for. Limiter is just the cap at the end.” —[prophet](#)

3 January 2024: “Pro mastering tip

Using multiple limiters can help to achieve louder masters with less artifacts

For example, you can use first limiter in clipper mode (or use a clipper) and second as a brickwall

Or use first limiter that is faster, second more transparent

Experiment” —[Nathaniel W.](#)

20 January 2024: “Fabfilter Pro-L 2

Limiting modes explained:

- Transparent: As the name says, this algorithm is designed to stay true to the original sound and feel as much as possible, avoiding pumping effects and coloring. It works great on most program material, but especially on rock and pop music.

- Punchy: Of all algorithms, this one is the most apparent. When pushed, it becomes quite punchy and will introduce a bit of pumping, which can add some nice flavor. Since it’s fairly ‘safe’, minimizing distortion most of the time, it works miracles on single tracks, like vocals, bass or guitar and can give a nice edge to beat-oriented music.

- Dynamic: By enhancing transients before actually applying limiting, this algorithm excels in preserving the original punch and clarity of your audio. It’s great on rock music, but it can work surprisingly well on other types of audio as well.



- Allround: This algorithm is designed to work well on almost any program material, striking a good balance between loudness and transparency.
- Aggressive: As the name implies, this algorithm uses an aggressive yet smart, near-clipping style of limiting. This works wonders on EDM/trance music but also shines on rock, metal or pop.
- Modern: As the new default style in Pro-L version 2, the Modern algorithm sets the new standard for all-purpose, transparent limiting. It can achieve very high loudness and allows for very near-zero lookahead settings, while still sounding extremely clean and natural.
- Bus: Especially nice for (drum) bus processing and individual tracks, this algorithm is not meant to be transparent, rather the opposite. Think glue, pump or squash.

Source: Fabfilter Manual.” —[Nathaniel W.](#)



## limits

keyword: COBOL reserved word (z/OS)

## linage

keyword: COBOL reserved word (z/OS)

## linage-counter

**keyword:** COBOL reserved word (z/OS)

## Abraham Lincoln

Lincoln was elected president from a third party that was at the time only five years old.

“His weak, wishy-washy, namby-pamby efforts, imbecile in matter, disgusting in manner, have made us the laughing stock of the whole world.” —From an Illinois newspaper about Abraham Lincoln.

“I believe it is an established maxim in morals that he who makes an assertion without knowing whether it is true or false, is guilty of falsehood; and the accidental truth of the assertion, does not justify or excuse him.” —From an Illinois newspaper about Abraham Lincoln, 1846.

## line

**keyword:** COBOL reserved word (z/OS)

See: `_LINE_` — PHP and Ruby

## Line 5 Pipeline

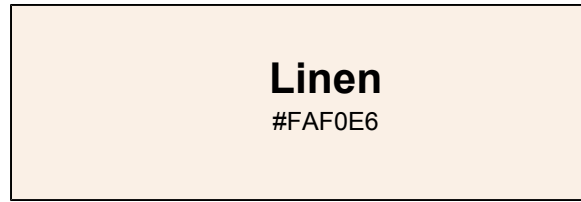
“The Line 5 oil pipeline crosses more than 280 rivers and streams that flow indirectly into the Great Lakes, waters that supply drinking water to over 40 million people. The 70-year-old pipeline has already ruptured at least 30 times. Help shut it down.” —[EarthJustice](#)

## line-counter

**keyword:** COBOL reserved word (z/OS)

## Linen

keyword: HTML color name



## lines

keyword: COBOL reserved word (z/OS)

## link

keyword: JavaScript windows non-standard method

## linkage

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

## lipstick case knife

*noun* “A knife enclosed within and made part of a lipstick case (Penal Code Section 16830)”  
[from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

## list()

keyword: PHP reserved word (this is a reserved word and not a function)

## literal

keyword: VHDL reserved key word

## Lite OS

operating system

Proprietary OS by Huawei

## Little Debbie Swiss Rolls

Little Debbie Swiss Rolls are banned in Austria and Norway because they include artificial food color dyes yellow 5 and red 40, which are carcinogenic. The European Union requires warning label saying “the coloring agents may have an adverse effect on activity and attention in children.”

## This Little Piggy

[big toe] This little piggy went to the market.

[long toe] This little piggy stayed home.

[middle toe] This little piggy has roast beef.

[ring toe] This little piggy had none.

[little toe] This little piggy cried “Wee! Wee! Wee!” all the way home.

The first line is quoted in a 1728 book and the full poem in 1760. The poem was the same as above, except the last line, which originally was"

This pig went to the barn's door and cried week, week for more.

Note that the first little pig did not go shopping at the grocery store. The poem is far darker than that.

## liver

a large lobed glandular organ in the abdomen of vertebrates, involved in many metabolic processes.

## loaded firearm

*noun* “Any firearm that has an unexpended cartridge or shell in or attached in any manner to the firearm (Penal Code Section 16840(b))” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

## local-storage

keyword: COBOL reserved word (z/OS)

## location

keyword: JavaScript windows object


## lock

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

## log

function: C math.h library function: stands for LOGarithm of a number

See: `.logic`  — file extension

## long

keyword: C keyword: data modifier

**keyword:** Java reserved key word

**keyword:** JavaScript reserved word

**keyword:** Objective-C reserved word

**keyword:** SQL reserved word (Oracle)

## loop

**keyword:** Ada reserved key word

**keyword:** SQL reserved word (z/OS)

**keyword:** VHDL reserved key word

## loops

14 November 2023: “If you are mad about kids using loops just wait

In 7 years all of Billboard is gonna be 14 years olds playing FL studio on Meta glasses like it's Fortnite” —[kennybeats](#)

## blue lotus

26 July 2023: “Lotiform Chalice

Third Intermediate Period

Ca. 945D664 B.C.

From Middle Egypt, Tuna el-Gebel region; From Egypt.

The fragrant blossom of the blue lotus is a common motif in all forms of Egyptian art.”

—[NTR of Pharaoh Khonshu Heru](#)



Because it opened its petals to the sun each morning, the flower became a symbol of creation and rebirth. During the Third Intermediate Period, faience chalices derived from the shape of the blossom and other faience delicacies were decorated with relief scenes.” —[NTR of Pharaoh Khonshu Heru](#)



“Evoking a constellation of myths having to do with the birth of the king as child of the sun god out of the watery marsh environment, and thus the renewal of the world out of the flooded land anticipated with the beginning of the Inundation at the Egyptian New Year.” —[NTR of Pharaoh Khonshu Heru](#)

## **lower**

keyword: SQL reserved word (z/OS)

## **lower\_mb**

keyword: SQL reserved word (z/OS)

## **low-value**

keyword: COBOL reserved word (z/OS)

## **low-values**

keyword: COBOL reserved word (z/OS)

## **low\_values**

keyword: SQL reserved word (z/OS)

## **lpad**

keyword: SQL reserved word (z/OS)

See: .lst — file extension

## Luanda, Angola

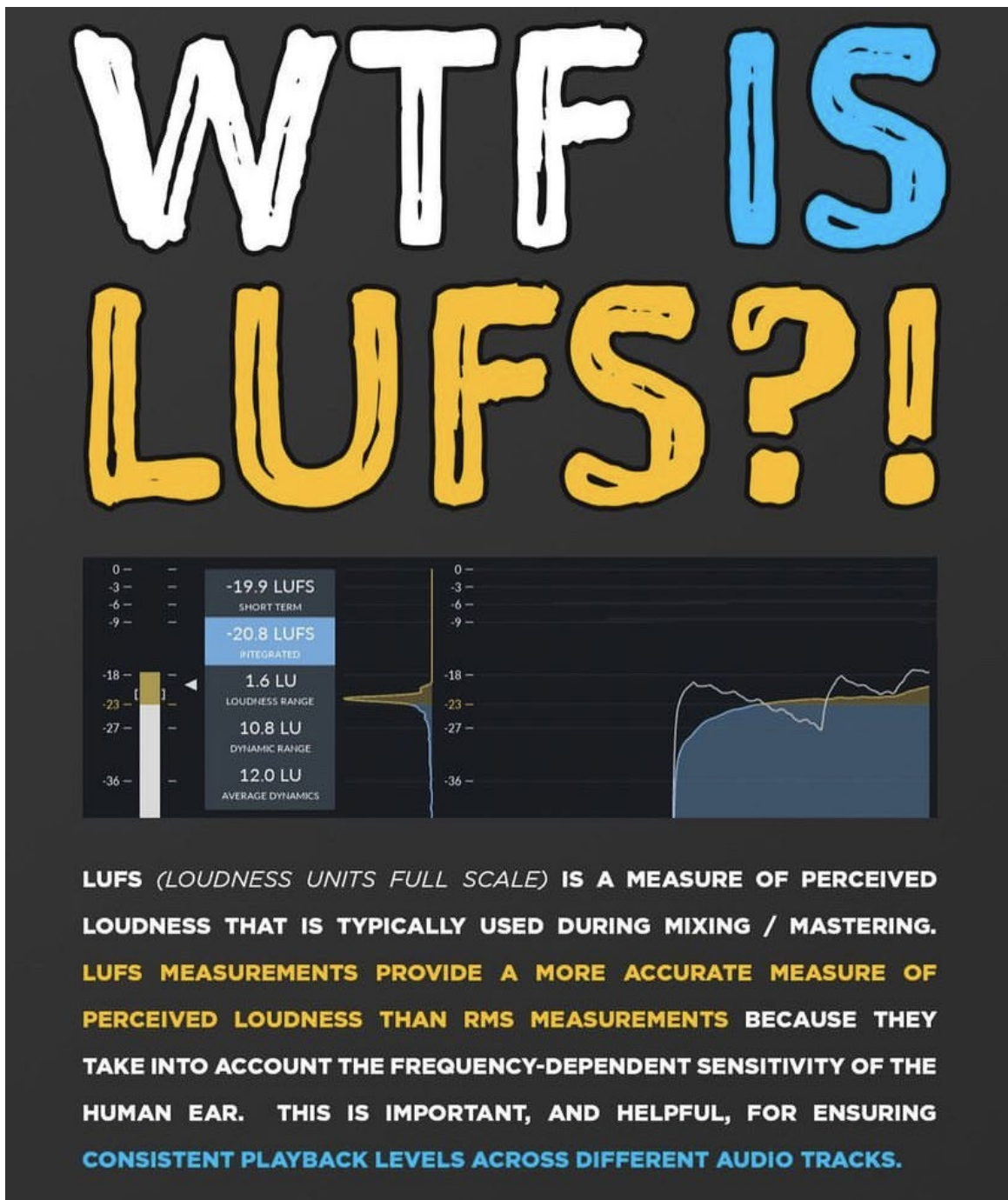
19 December 2023: “Luanda, Angola’s capital and largest city, is located on the northern Atlantic coast and is the most-populous Portuguese-speaking capital in the world. Luanda is also one of the oldest colonial cities in Africa, founded in 1576 by Portuguese explorer Paulo Dias de Novais.” —CIA World Factbook (material that expires after 30 days)



## LUFS

29 September 2023: “lufs cheat sheet

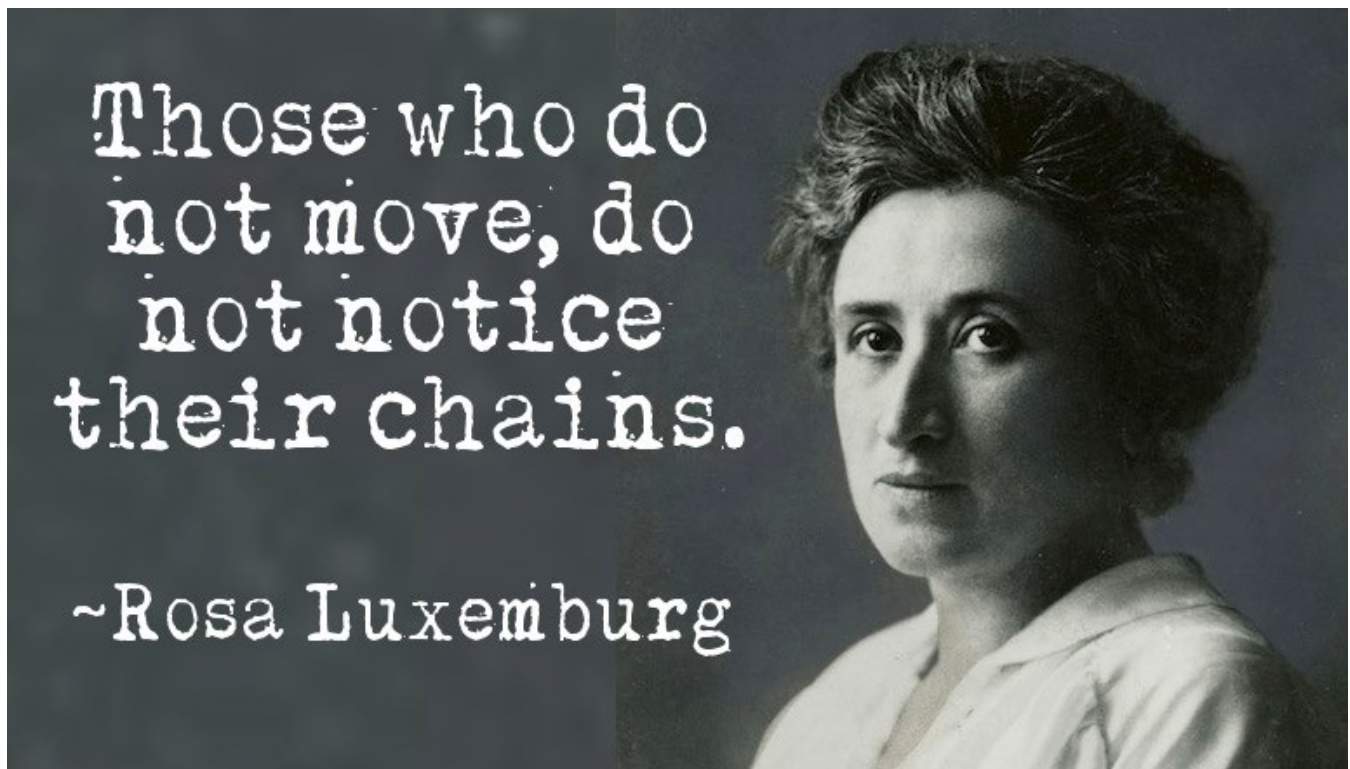
I tell people to aim for -3 to -6db on their master channel with no plugins activated on the master - so letting it naturally hit that level through the mixdown - I generally send back a 24bit dithered Master hitting 9-12 LUFS on longterm scaling” —[Solar Heavy](#)



9 October 2023: “lufs cheat sheet” — [Solar Heavy](#)



**Rosa Luxemburg**



“Those who do not move, do not notice their chains.” —Rosa Luxemburg

## Luxor Temple

15 December 2023: “Glorious sunset exploring #Luxor Temple today” —[Dr Campbell Price](#)







15 December 2023: “New lighting inside too!” —[Dr Campbell Price](#)





**See: lysine**

# M m

## M

ASCII: 4D hex

UNICODE: LATIN CAPITAL LETTER M

## m

ASCII: 6D hex

UNICODE: LATIN SMALL LETTER M

See: .m2t  — file extension

See: .m2ts  — file extension

See: .m4a  — file extension

See: .m4b  — file extension

See: .m4p  — file extension

See: .m4v  — file extension

## MACE (Mansfield and Cahlander Executive)

## operating system

Proprietary OS by Control Data Corporation.

## Machu Picchu

8 January 2024: “Machu Picchu (meaning “Old Mountain” in Quechua) in the foreground and Huayna Picchu (meaning “Young Mountain”) on the right are both mountains in Peru that rise above Machu Picchu, the city of the Incas. The Incas built a trail up the side of Huayna Picchu and temples and terraces at its top. Huayna Picchu is 2,693 m (8,835ft) high, making it approximately 260 m (850 ft) taller than Machu Picchu.” —CIA World Factbook (material that expires after 30 days)



## macOS

### operating system

Proprietary OS by Apple for the Apple Macintosh.

**Apple Macintosh**

## macOS Server

operating system

Proprietary OS by Apple for the Apple Macintosh.

**Apple Macintosh**

## Mac OS X

operating system

Proprietary OS by Apple for the Apple Macintosh.

**Apple Macintosh**

## Mac OS X Server

operating system

Proprietary OS by Apple for the Apple Macintosh.

**Apple Macintosh**

## Magenta

keyword: HTML color name

**Magenta**  
#FF00FF



## magnusoft ZETA

operating system

Proprietary OS developed by yellowTAB, based on BeOS r5.1d0 source code. —[Wikipedia: List of operating systems](#)

## magocracy

“MAGOCRACY — Government by professional magic-users only.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

## main

keyword: C keyword: function that contains marks the beginning of executable C statements.

## Malcolm X

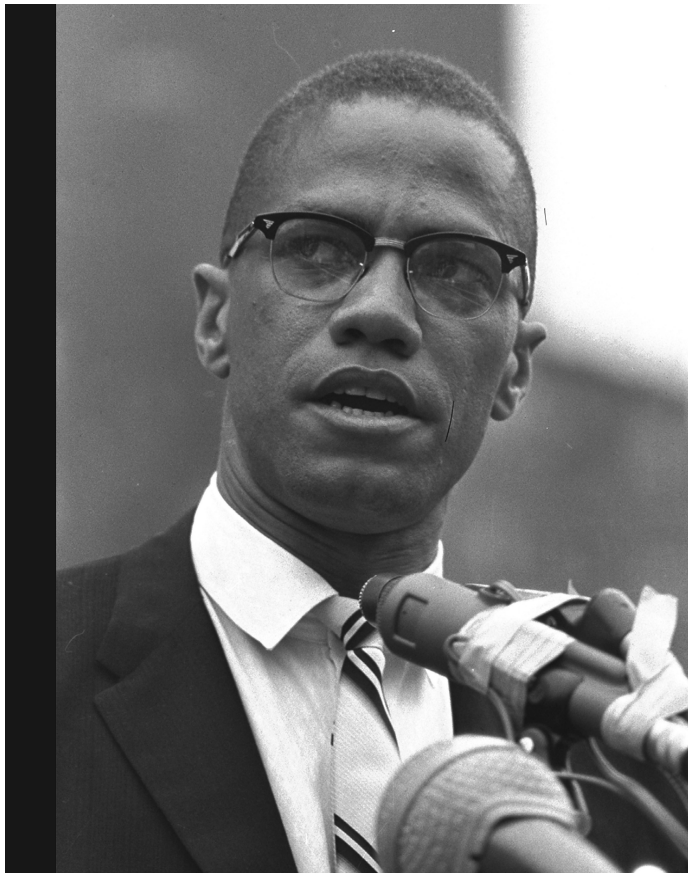
“If you’re not careful, the newspapers will have you hating the people being oppressed, and loving those doing the oppressing.” —Malcolm X

“I’m for truth, no matter who tells it. I’m for justice, no matter who it is for or against. I’m a human being first and foremost, as as such I’m for whoever and whatever benefits humanity as a whole.” —Malcolm X

“You can’t separate peace from freedom because no one can be at peace unless he has his freedom.” —Malcolm X, 1965

“You show me a capitalist, and I’ll show you a bloodsucker.” —Malcolm X

“The only way we’ll get freedom for ourselves is to identify ourselves with every oppressed people in the world. We are blood brothers to the people of Brazil, Venezuela, Haiti, Cuba -- yes Cuba too.” —Malcolm X



**You're not  
supposed to be  
so blind with  
patriotism that  
you can't face  
reality. Wrong is  
wrong no  
matter who  
does it or who  
says it.**

**~Malcolm X**

“You’re not supposed to be so blind with patriotism that you can’t face reality. Wrong is wrong no matter who does it or says it.” —Malcolm X

“If Johnson had been running all by himself, he would not have been acceptable to anyone. The only thing that him acceptable to the world was that the shrewd capitalists, the shrewd imperialists, knew that the only way people would run toward the fox would be if you showed them a wolf. So they created a ghastly alternative. And it had the whole world—including people who called themselves Marxists—hoping that Johnson would beat Goldwater.” —Malcolm X

“I have no mercy or compassion in me for a society that will crush people, and then penalize them for not being able to stand up under the weight.” —Malcolm X

“The white conservatives aren’t friends of the Negro either, but they at least don’t try to hide it. They are like wolves; they show their teeth in a snarl that keeps the Negro always aware of where he stands with them. But the white liberals are foxes, who also show their teeth to the Negro but pretend that they are smiling. The white liberals are more dangerous than the conservatives; they lure the Negro, and as the Negro runs from the growling wolf, he flees into the open jaws of the “smiling” fox.” —Malcolm X

## **Mali**

12 August 2023: “Mali has revoked Air France’s permit to fly to their African nation.”

—[Africa Archives](#)

12 August 2023: “Mali cancels Air France flight permit

Mali has revoked Air France’s permit to fly between Paris and Bamako after the carrier suspended operations to and from the country over regional instability.

The Malian authorities said the suspension breached the terms of its permit to operate the route. In a letter addressed to Air France, the National Civil Aviation Agency said the company had not provided notice and caused “inconvenience to passengers”.

“This failing entails the cancellation of your flight operating permit” for the summer season extending to October and other airlines could use the route, it added.

The agency asked Air France to submit a new flight programme before it could resume the service.” —[DD Geopolitics](#)

12 August 2023: “IRAN has offered military assistance to MALI and BURKINA FASO”

—[Jackson Hinkle](#)

29 August 2023: “BREAKING: Under immense pressure to “pack and go,” the UN forces in Mali have hastily withdrawn from the country.

Report:

The United Nations’ peacekeeping mission in Mali has sped up its withdrawal from the city of Ber in the north after a surge in fighting.

The UN mission, known as MINUSMA, said in a statement on Sunday that “deteriorating security” had made its departure urgent. - AJ

SO, according to MINUSMA, the UN forces withdrawal was brought forward (made to happen way earlier than initially scheduled) because security suddenly deteriorated in the Ber region where they were stationed and that put their Blue Helmets (UN soldiers) in danger. That’s what they claim to be the reason they had to leave early and hastily.

Also, Al Jazeera reports that in recent days, the Tuareg-led northern rebel alliance, called the Coordination of Azawad Movements (CMA), accused Malian forces and Russian Wagner Group troops of violating a ceasefire by attacking its forces near Ber. Of course the Malian government has a different account of what happened, saying the terrorist have suddenly gained steam and are attacking their forces, so Wagner and their army had to face them.

Let’s unpack. So, the new Malian administration comes to power and after cancelling the infamous “pact for the continuation of colonization” which colonial France forced its colonies in AFRICA to sign, they immediately asked French soldiers to leave. After that, they looked at the UN forces and realized they and the French soldiers are one and the same, so they ended the UN forces’ nearly ten years mission in their country and asked them to “leave immediately!”

UN mission claimed they were there to assist France in eliminating rebel groups that have made life a living hell in the Sahel country. The military administration in Mali doesn’t think so. The Malian population didn’t share that sentiment at all. Malians claim instead that the presence of these foreign forces have made things worse, even accusing French soldiers of aiding, abetting and arming terrorists and UN of providing cover for terrorists. UN and French soldiers deny these allegations.



When the Malian authority eventually asked the UN to join their French buddies in packing up and leaving the country, it was a hard pill to swallow for the UN. But they had to comply immediately. Malians celebrated this and China welcomed it, saying the west should learn to empower African countries to deal with terrorism and not sending their own forces on African soil to fight terrorism.

But reacting to the development, the US envoy to the UN lashed out at Wagner and Russia saying the UN mission was there to protect Malians from Al Qaeda and Wagner terrorists who terrorized the people and that it was unfortunate Mali was asking them out. France and pretty much all of the west fumed at the development.

Meanwhile, Macron has praised the French Ambassador in Niger who refused to leave the country after he was asked to leave. The so called Ambassador is practically under house arrest but he refuses to leave and Macron calls that “heroic” saying France doesn’t recognize the Tchiani - led regime in Niger. Many wonder what the difference is between Mali and Niger that the French agreed to leave in Mali and Burkina Faso under similar circumstances, but now refuse to leave in Niger.” —[J. C. Okechukwu](#)

## malloc

function: C library function: stands for Memory ALLOCation

## Nelson Mandela

“I should tie myself to no particular system of society other than socialism.” —Nelson Mandela

“For to be free is not merely to cast off one’s chains, but to live in a way that respects and enhances the freedom of others.” —Nelson Mandela

## Manhattan Project

2 August 2023: “You won’t see this in the Oppenheimer movie!

Between 1945 and 1947, 18 people were injected with plutonium, six with uranium, five with polonium, and at least one with americium by the Manhattan Project medical team. Only one of the subjects signed a consent form. The rest had no idea what was being injected into them. Reports show that many of the low-level physicians themselves were unaware of the exact substance they were injecting into patients.

These human subjects were essentially used as guinea pigs and calibration devices.

It was very important, you see. They needed to understand the dangers facing Manhattan Project workers and how to protect them. They were, of course, developing a weapon to eviscerate over 100,000 Japanese civilians. There is even evidence that Oppenheimer himself approved shipments of plutonium and uranium to be used for medical research.

During these experiments, the follow-up research was not thorough. Samples were contaminated or destroyed in transport on multiple occasions, and the ethical issues involved were essentially ignored.

The physicians involved knew that the procedures had no therapeutic benefits and would be detrimental in the long run if the patients lived. Human experimentation was justified because it was claimed that the patients were terminally ill; however, this was not true in all cases. Repeated errors in diagnosis, procedure, documentation, and research were made.

Fun fact: This was not known to the public until 30 years ago.

The Government covered up most of these radiation mishaps until 1993, when President Bill Clinton ordered a change of policy. Federal agencies then made available records dealing with human radiation experiments.

It is important to understand the lengths your Government will go to if those in charge believe it to be within their self-interest. They will lie, cheat, deceive, and straight up harm those that get in their way (or that they need for a simple human radiation experiment), and the public won't find out for decades, and nobody will be held accountable.

I shouldn't have to remind you that this same Government is still in charge today. Although the Manhattan Project may have been disbanded, Government agencies just like it still exist and operate today.

Who knows what is currently in development behind closed doors, who is being experimented on, and what atrocities are being committed today? If the past is any indication of the future, we won't know for another 50 years what is currently going on.

I think when we look back on stories like this, it becomes increasingly obvious that those in Government, especially the unelected, top-secret kind, cannot be trusted. Those who still advocate expanding, maintaining, or doing anything other than drastically dissolving the Government and its unaccountable agencies absolutely baffle me.

Transparency, consent, and accountability are tantamount to a free and flourishing society. Maintaining an incentive structure that often results in the opposite seems like a catastrophically bad idea.

What do you think?" —[Dylan Allman](#)

## manholes

13 December 2023: "Manhole covers are a familiar sight around the world.

But did you know that designer manhole covers in Japan are currently gaining so much attention as a new type of region-specific item/artwork, that they can cost up to \$900?

Japan's decorated manhole covers initially took shape as a public relations campaign for sewers. Beginning in the 1950s, the cast plates featured simple geometric patterns, such as the



“Tokyo” and “Nagoya” designs.

Yasutake Kameda conceived the intricate, artistic versions in 1985, to help warm a skeptical rural population to the idea of the costly but necessary modernization of the country’s sewer system.

Local design manholes in Japan feature elements special to a particular location: a town emblem, landmark, event, or official bird or flower. Today an estimated 95% of Japan’s 1,718 municipalities, across all 47 prefectures, now host their own unique covers.

Typically, a designed manhole cover costs approximately \$585. The color, however, is applied carefully by hand, and nearly doubles the price of a manhole to more than \$900.”

—[Massimo](#)



## Manley Massive Passive

6 December 2023: “Manley Massive Passive

Manley Massive Passive is a high-end stereo equalizer designed by Manley Labs. It was first introduced in the late '90s.

The unit gained popularity for its special construction and implementation of vacuum tubes, combining modern precision with vintage warmth.

The schematic of Massive Passive was based on Pultec EQP1A, making it kind of Pultec on steroids, that is more optimized for mastering applications since it has much more control.



The circuitry features a unique “Massive Passive” filter design, allowing for broad tonal shaping with both low and high-frequency shelves, as well as parametric midrange controls.

The tubes in the Massive Passive contribute to its unique sound signature, introducing a rich and harmonically pleasing character to the audio signal.

In terms of sound, the Massive Passive is known for its transparency, musicality and the ability to sculpt the frequency spectrum in its unique manner. It’s often described as adding a certain “magic” to the audio, enhancing the overall sonic quality.

It adds warmth, depth, and a touch of vintage coloration to the audio passing through it.

It was designed for mastering, but could be used on variety of audio sources if you looking to add richness and transparent spectral control to your sounds.

Its versatility makes it suitable for a wide range of musical genres, providing a powerful tool for achieving high quality production.” —[Nathaniel W.](#)



See:.map — file extension

## map

keyword: VHDL reserved key word

## Maraschino cherry

Maraschino cherries are banned in Austria, Finland, France, Norway, and the U.K. because they include red dye #40, which is linked to allergies, migraines, and mental disorders in children.

## Julianna Margulies

2 December 2023: “Actress Julianna Margulies apologized Friday for recently claiming Black people were “brainwashed to hate Jews.”

“I am horrified by the fact that statements I made on a recent podcast offended the Black and LGBTQIA+ communities, communities I truly love and respect,” Margulies said in a statement to Deadline. [Note that she isn’t horrified that she said those things, she is horrified that Black and LGBTQIA+ were offended.]

“I want to be 100% clear: Racism, homophobia, sexism, or any prejudice against anyone’s personal beliefs or identity are abhorrent to me, full stop,” Margulies continued. “Throughout my career I have worked tirelessly to combat hate of all kind, end antisemitism, speak out against terrorist groups like Hamas, and forge a united front against discrimination. I did not intend for my words to sow further division, for which I am sincerely apologetic.” [Note that she is upset about her words “sowing division” rather than her words being racist bigotry.]

On the The Back Room with Andy Ostroy podcast last Monday, Margulies claimed that Black people have been “brainwashed to hate Jews” and that a Black lesbian club at Columbia University put signs up saying “No Jews allowed.” She and Ostoy discussed antisemitism and the Israel-Hamas conflict.

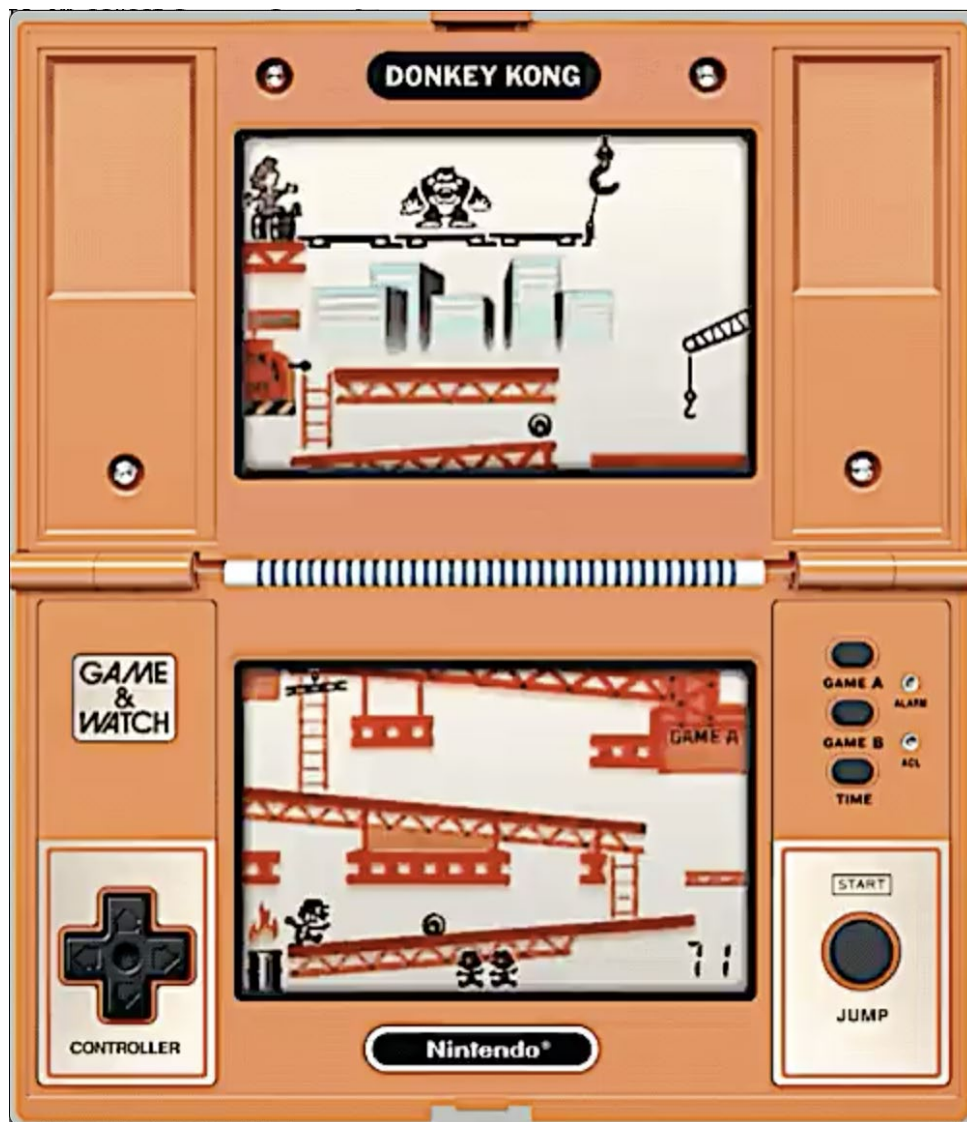
“A, you’re black and B, you’re gay,” Margulies said. “And you’re turning your back against the people who support you?” ” —[The Hill](#)

## marijuana legalization

Joe Biden opposes legalizing marijuana.

## Mario

On page 7 of the original Japanese instructions, the protagonist of *Donkey Kong* (Game & Watch version) was called Kyūjo Man (救助マン), meaning “rescue man”, as the name Mario had not been established yet. The English manual called him the “rescuer”. That game was the first game to include the classic cross shaped move button. The captive girl was unnamed in the English instructions and called Lady in the Japanese instructions. British advertisements called her Louise.



## Marion lynching

Brief history behind the “festive lynching” photo:



On 7 August 1930, black teenagers Tom Shipp, Abe Smith, and James Cameron were in the Marion, Indiana, jail on charges of murdering Claude Deeter and rapng Mary Ball. A white mob beat Shipp and Smith, mutilated them, and hung them, as shown in the picture above of the “festive lynching”.

## Bob Marley

“They don’t want to see us unite  
 All they want us to do is keep on fussing and fighting  
 They don’t want to see us live together  
 All they want us to do is keep on killing one another.” —Bob Marley

michaelm painted the backdrops used on several Bob Marley tours and painted the portraits of Bob Marley and his mother at Bob Marley’s tomb.



# Maroon

keyword: HTML color name



# Mars

Mars is the only planet completely occupied by robots. There are four robot rovers: Sojourner, Opportunity, Spirit, and Curiosity.

## colonizing Mars

“Despite Musk claiming Sagan couldn’t even dream of colonising Mars, he actually does address that to congress [in 1985]. He says it doesn’t matter if we colonise other planets as Earth will be our home for the foreseeable future. Musk ignores this so he can imply he’s smarter than Sagan.” —[Cattell84 - Climate Action Now](#)

# Karl Marx

Contrary to the 12 uAugust 2023 claims by Fox News, Karl Marx did not write *Mein Kampf*. Adlof Hitler wrote *Mein Kampf*. —[Doug Aoki](#)

“Democracy is the road to socialism.” —Karl Marx

“The bourgeoisie, by the rapid improvement of all instruments of production, by the immensely facilitated means of communication, draws all, even the most barbarian, nations into civilization. The cheap prices of its commodities are the heavy artillery with which it batters down all Chinese walls, with which it forces the barbarians’ intensely obstinate hatred of foreigners to capitulate. It compels all nations, on pain of extinction, to adopt the bourgeois mode of production; it compels them to introduce what it calls civilization into their midst, i.e., to become bourgeois themselves. In one word, it creates a world after its own image.” —*The Communist Manifesto*, Karl Marx

## instant mashed potatoes

Instant mashed potatoes are banned in Australia, the European Union, and Japan include Butylated Hydroxyanisole (BHA), a preservative used in rubber and wax food packaging, and linked to cancer.

## mask

30 August 2023: “Stranger: (fake coughs loudly upon seeing me in a mask)

Me: Are you ok

Stranger: Yeah

Me: You should probably see a doctor for that fake cough

Stranger: What

Me: Faking symptoms of illness for attention could be a sign of Munchausen Syndrome, a serious psychological disorder” —[Guinness Pig](#)

## George Mason

“We ought to attend to the rights of every class of people ... provide no less carefully for the happiness of the lowest than of the highest orders of citizens.” —George Mason.

Notice that the rich white slave owners who created the US viewed some people as low as some as high.

## masss-energy equivalence

“Mass-energy Equivalence: This equation indicates that mass ( $m$ ) and energy ( $E$ ) are interchangeable. It shows that the energy of an object is equal to its mass multiplied by the square of the speed of light  $c$ . It implies that a small amount of mass can be converted into a large amount of energy and vice versa.” —[Science Simplified](#)

## mass extinction

19 November 2023: “If the current course is not altered, we’ll reach 9 to 15 billion (likely the former) by 2050.

“We’re in the midst of a the Earth’s sixth mass extinction crisis. Harvard biologist E. O. Wilson estimated that 30,000 species per year (or three species per hour) are being driven to extinction. Compare this to the natural background rate of of one extinction per million species per year, and you can see why scientists refer to it as a crisis unparalleled in human history.”

Source: Center for Biological Diversity ” —[Stephanie Voltolin](#)

## mastering

14 July 2023: “In modern music production what’s the point of separating the mix and mastering process? Levels aside a master is basically a final mix.” —[JUSTIN](#)

**from me:**I sure you will get different interesting answers. The two differences for me are:

- 1) the mix is the “ideal” state of the song, while the master is for a particular distribution media.
- 2) the mix is inherent to the one song, while mastering includes how all the songs fit together.

As an example, back in the day we mastered for vinyl and cassette and later added mastering for a CD as well.

In modern times, is the release to a streaming service or a digital download, etc.

I’d master separately for each different streaming or download service.

Our engineer played brief clips from the songs and showed how they didn't sound like they belonged together.

Once all the songs had been mastered to be a single composite work, the entire flow of the music had continuity beyond just the order of the songs.

Not on that first collection, but on subsequent ones, we even went as far as adding new or replacing existing parts to foreshadow and recall the other songs in the collection& to make them sonically more consistent.

Changes for only that one particular collection.

The main official reference mix remained unchanged (with the exception of one song).

As an example, on one 3 song collection, all the rhythm guitar parts were recorded again with the same amp and guitar combo (with different effects to personalize each song).

My point is that mixing and mastering have different purposes.

The official final mix is the Platonic ideal for that particular song, while the mastering is bringing that song into one particular real world instance of the song.

As one more side note, I would love to be able to show you the examples I am discussing, but so much of our music was destroyed when the Costa Mesa thief (see that entry) stole our master tapes and hard drives to sell them for the iron content.

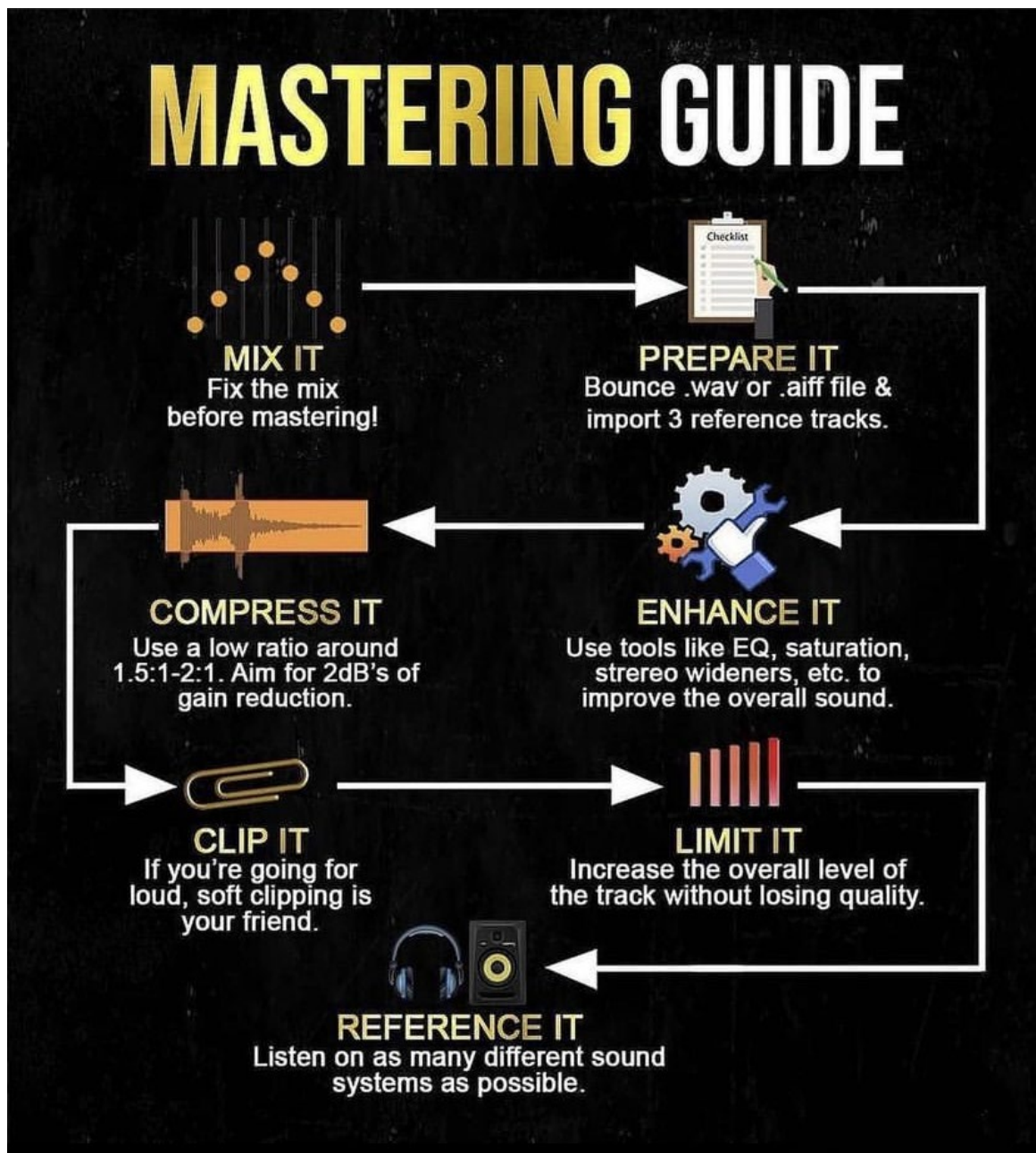
14 October 2023: “so many reasons why you should get your song mastered by someone that isn’t you and has no emotional connection to the song” —[Solar Heavy](#)

27 November 2023: “Audio Mastering is a flow state process that you don’t stop and get creative with the mix, you continuously move through the song step by step with your own signal chain and that’s really the secret, a good Master is an effortless one.” —[Solar Heavy](#)

7 September 2023: “mastering cheat sheet” —[Solar Heavy](#)



8 December 2023: “mastering cheat sheet” —[Solar Heavy](#)



24 December 2023: “Recommended FREE plugin!

Great all-in-one mastering solution.

- “Analog” mastering chain in a single plugin
- Simple workflow and intuitive metering
- Preset list
- Onboard stereo enhancement and saturation

Link below” — [Nathaniel W.](#); free donload link: [PA FREE bx\\_masterdeck Classic](#)



25 December 2023: “Pro mastering tip

Consider monitoring mid and side signals separately. If you hear a lot low frequencies when turning side monitoring on, this may be the indicator that your mix does not sound at its full potential

Try to remove all boominess and mudiness from the side signal, and listen if it improved clarity and punch

There are some EQs and monitoring plugins that allow to solo mid and side separately”

—[Nathaniel W.](#)

28 December 2023: “vst cheat sheet” —[Solar Heavy](#)





28 December 2023: “And the Youlean Loudness Meter” — [ANT](#)

28 December 2023: “it’s a must a have - and a link to it on my site if anyone doesnt have it already” — [Solar Heavy](#)

1 January 2024: “I’ve listened to some pro mastering engineer and he said

“Yes there is a chance that if the mix is truly great, I will listen to it and just set the loudness right, without any processing”

And it is still worth the money. Why?

Because it’s like insurance. You pay super experienced person, \$50 for example (my price for just mastering).

And he, with his enormous listening experience, and fantastic monitoring environment listens to your mix and says if it’s release ready or not. And if not then he fixes it as much as possible.

If you have bad frequency response in your room due to monitors or acoustics, it can be compensated during mastering in a better room. And your mix gonna sound much more neutral, and will translate well. But the mix itself should be done well anyway of course.

When you pay for insurance it also doesn’t necessarily mean that some job will be done. But you pay for being calm. That if something happens, it will be fixed.

Pretty much the same here. Of course when you send your song for mastering to an experienced engineer with much better listening conditions, he most likely will do something to

it, obviously.

But first of all, it's about being calm that your song gonna sound well before you release it.”

—[Nathaniel W.](#)

## Math

keyword: JavaScript object

## matriarchy

“MATRIARCHY — Government by the eldest females of whatever social units exist.” —

Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

## max

keyword: SQL reserved word (z/OS)

## maxextents


keyword: SQL reserved word (Oracle)

## McDonalds

3 February 2024: “Imagine if this happened in a communist country we would never hear the end of it. but because it's in America slavery is fine” —[inhumans of capitalism](#)



See: .mdb — file extension

See: .mdi  — file extension

## mean absolute error

*noun*

*mathematics* The average of all absolute errors.

## measles

16 January 2024: “Measles has a 16.2% case fatality rate for unvaccinated children under 5 years and 24% for children under 9 months (who are unable to be vaccinated).

In modern times, 30% of measles cases that do not result in death still result in one or more complications like pneumonia, blindness, deafness, or encephalitis

One of the scariest things I’ve ever seen in my life was an unvaccinated child with measles pneumonia. That image of suffering will stick with me always. They “survived” after a prolonged period of multi organ failure on the most intensive life support systems available.

I’ve taken care of a young kid who ended up on ECMO from measles pneumonia because his mom thought vaccines were toxic based on misinformation so never had him vaccinated and when he got sick waited to seek conventional medical care until he was literally blue from lack of oxygen” —[Ryan Marino, MD](#)

## medicare for All

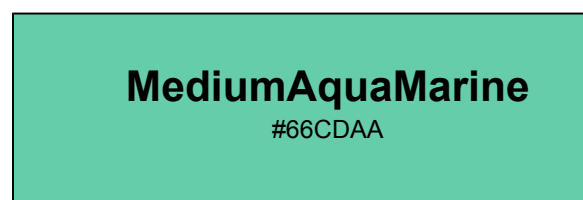
Joe Biden voted against Medicare for All and promised to veto it if COngress ever passed it.

## Joseph Medicine Crow

Joseph Medicine Crow earned the title “chief” by completing the four coups of (1) leading a war party, (2) touching an enemy without killing him, (3) taking an enemy’s weapon, and (4) stealing an enemy’s horse — all against the Nazis in WWII.

## MediumAquaMarine

keyword: HTML color name



## MediumBlue

keyword: HTML color name

## MediumBlue

#0000CD

## MediumOrchid

keyword: HTML color name

## MediumOrchid

#BA55D3

## MediumPurple

keyword: HTML color name

## MediumPurple

#9370DB

## MediumSeaGreen

keyword: HTML color name

## MediumSeaGreen

#3CB371

## MediumSlateBlue

keyword: HTML color name

## MediumSlateBlue

#7B68EE

## MediumSpringGreen

keyword: HTML color name

## MediumSpringGreen

#00FA9A

## MediumTurquoise

keyword: HTML color name

## MediumTurquoise

#48D1CC

## MediumVioletRed

keyword: HTML color name

## MediumVioletRed

#C71585

## Mein Kampf

Contrary to the 12 August 2023 claims by Fox News, Karl Marx did not write *Mein Kampf*. Adlof Hitler wrote *Mein Kampf*. —[Doug Aoki](#)



## Golda Meir

22 September 2010: Journalist Gideon Levy (son of Holocaust parents and a one-time aide to former president Shimon Peres) wrote that Golda Meir told him “We will never forgive the Arabs for forcing us to kill their children. We are the victims. We are forced to kill their children and poor us. As the victim and the only victim in history, again, it enabled us the rights to do whatever we want and nobody is going to tell us what to do because we are the only victims.” — Golda Meir

## melody

14 November 2023: “theory cheat sheet” — [Solar Heavy](#)


# Melody Accent

Add details, excitement & interest


Make your track more dynamic and exciting by adding accents on some important notes.

All you need to do is copy the notes that could emotionally impact the listener and play them with a new sound on top of the main melody.

Accent



Melody



## memory

keyword: COBOL reserved word (z/OS)

## memory\_size

keyword: SQL reserved word (z/OS)

## H.L. Mencken

“People do not expect to find chastity in a whorehouse. Why, then, do they expect to find honesty and humanity in government, a congeries of institutions whose modus operandi consists of lying, cheating, stealing, and if need be, murdering those who resist?” —H.L. Mencken

## Mentuhotep II

31 December 2023: “BLACK AFRICAN KING & QUEENS OF THE 12TH DYANSTY

Mentuhotep II, also called Nebhapse, king of ancient Kemet's (Egypt's) 11th Dynasty who, started as the ruler of the southernmost regions of Kemet in about 2080 BC, and reunified the country by defeating his rivals in Lower Kemet. He ushered in the period known as the Middle Kingdom (1938–1630 BC).

In the 14th year of his reign, Kemet had become a fractured nation due to successive raids in the Delta via the Levant. Mentuhotep launched a drive against Heracleopolis in an attempt to eliminate foreign influence and reunify the country. Not much is known of the war, but the Wasetians (Thebans) were aided by a change of rulers in the enemy capital of the Delta, and, by 1668 BC at the latest, Mentuhotep had captured Heracleopolis and reunited the nation. In subsequent years, fighting continued in the north against the Bedouin of the Arabian Peninsula, who habitually raided the delta region.

To consolidate the unification, Mentuhotep received the submission of Middle Kemet's local governors, most of whom he left in office, thereby establishing a series of powerful provincial families during the early Middle Kingdom. Waset (Thebes), located in the southern most regions of the nation became the national capital, and Mentuhotep's loyal supporters received the key government posts; he also accepted partisans of the defeated Heracleopolitans who demonstrated loyalty and pledged fealty to his new order.

The reunification of Kemet under Mentuhotep II ushered in a new sense of security

throughout the country and established Kemet's Middle Kingdom, an era that was to become a golden age for artistic and literary creation and a truly revolutionary period in regard to religion and Kemetic principals. The art of the Middle Kingdom betrays a wide range of visual uses of the past and, although the Memphite traditions of the Old Kingdom were briefly renewed, the kings of the 11th Dynasty tended to favor the Wa-Setian (Theban) traditions they had developed during the First Intermediate Period.

Mentuhotep's reunification was followed by great expansion in trade and building. At Waset he built a magnificent temple and tomb complex. The hills around the monument were honeycombed with the tombs of his officials. He built temples at numerous Upper Kemetic (Egyptian) sites, but little survives of them today. Much of what he built was destroyed by the later Sais princes of the Delta, Assyrians and Greek mercenaries who together destroyed the Temple of Karnak at what is known as the "Sacking of Thebes". He died about 1957 BC, leaving a reunited and prosperous kingdom to his successor, Sankhkare Mentuhotep III. Tradition accorded Mentuhotep II an honoured place with Kemet's other great unifiers, Narmer of the 1st Dynasty, Ahomse I of the 18th, and King Piye of the 25th.

#### QUEEN ASHAYET

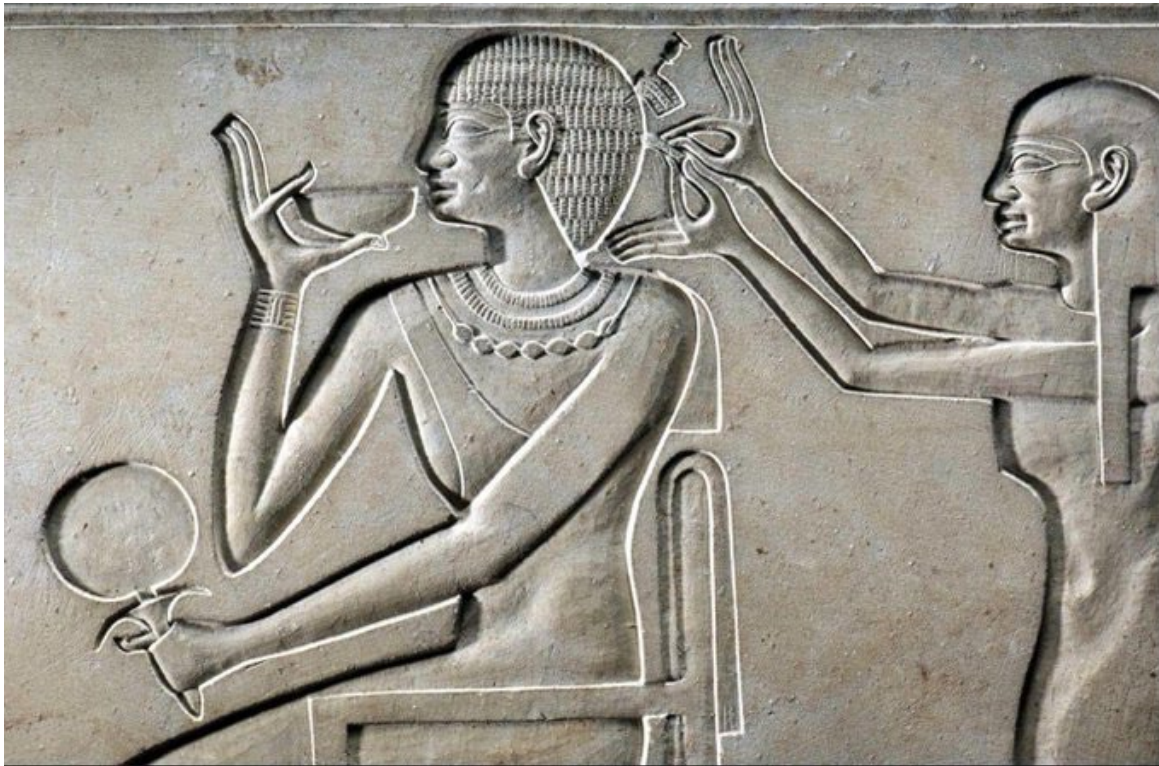
Ashayet or Ashait was a queen consort, and wife of Mentuhotep II in the 11th Dynasty. She shared a tomb with four other women in their twenties and a young girl, Henhenet, Kawit, Kemsit, Sadeh and Mayet three of which were her sister wives. The shrines and burials were found in Mentuhotep II's Deir el-Bahari temple complex. Her titles were: King's Great Royal Wife, Priestess of Het-Heru (Hathor), Great of Kas, Foremost in her places, and Lady of Dendera.

The nine shrines in total were built in the First Intermediate Period, prior to Mentuhotep II's reunification of Kemet (Egypt). She and three other women of the six bore queenly titles, and most of them were Priestesses of Het-Heru (Hathor). The location of their burial is significant to their titles as Priestesses of Het-Heru as the cliffs of Deir el-Bahri were sacred from the Old Kingdom onwards." — [Typical African](#)









“The artwork is a facsimile created by Charles K. Wilkinson in 1926 from the original painting on the inner, front side of the sarcophagus of Aashyt. In the image it depicts the Priestess Queen Ashayet on her throne smelling a lotus, and being presented with various offerings by her royal servants. The women on the right sitting on her throne is one of her various sister wives.

#### QUEEN KEMSIT

Kemsit was a Kemetic Queen and royal Priestess of Het-Heru and royal consort of Menuhotep II of the 11th Dynasty. Her tomb and decorated chapel were found in her husband's Deir el-



Bahari temple complex, behind the main building, along with the tombs of her five other sister wives.

Most of them were priestesses of Het-Heru, so it is possible that they were buried there as part of the Neter's (Goddess's) spiritual followers, and they were most likely daughters royal of nobility. Her titles were: King's Beloved Wife, Priestess of Het-Heru and King's Ornament.

### QUEEN KAWIT

Kawit was an ancient Kemetic queen consort, and a lower ranking wife of Neswet (Pharaoh) Mentuhotep II of the 11th Dynasty. Her and decorated chapel was found in her husband's Deir el-Bahari temple complex, behind the main building, along with the tombs her five sister wives. The queen was also depicted on reliefs in the funerary temple of her husband Mentuhotep II. These depictions are today heavily destroyed, but it seems that she appeared in a scene showing a row of royal women.

Her titles were: King's Beloved Wife, King's Ornament, and Priestess of Het-Heru. She and three other women of the six bore queenly titles, and most of them were priestesses of Het-Heru, known to the Greeks as Hathor, so it is possible that they were buried there as part of the goddess's cult, but it is also possible that they were the daughters of nobles the king wanted to keep an eye upon.

“King of Upper Kemet...Beautiful is the Ka-Soul of Ra who appears in Waset”

“I have not spoken angrily or arrogantly. I have not cursed anyone in thought, word or deeds.”  
~ 35th & 36th Principals of Ma'at” —[Typical African](#)

## Mercury

Mercury has the thinnest atmosphere of any of the planets in our solar system.

## merge

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

## merged intelligence

The merger of human programming with artificial intelligence.

## message

keyword: COBOL reserved word (z/OS)

## metaclass

keyword: COBOL reserved word (z/OS)

## meta\_hint

keyword: SQL reserved word (z/OS)

## metal knuckles

*noun* “Any device or instrument made wholly or partially of metal held in or worn on the hand for offensive or defensive purposes (Penal Code Section 16920)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

## methane hydrate destabilization

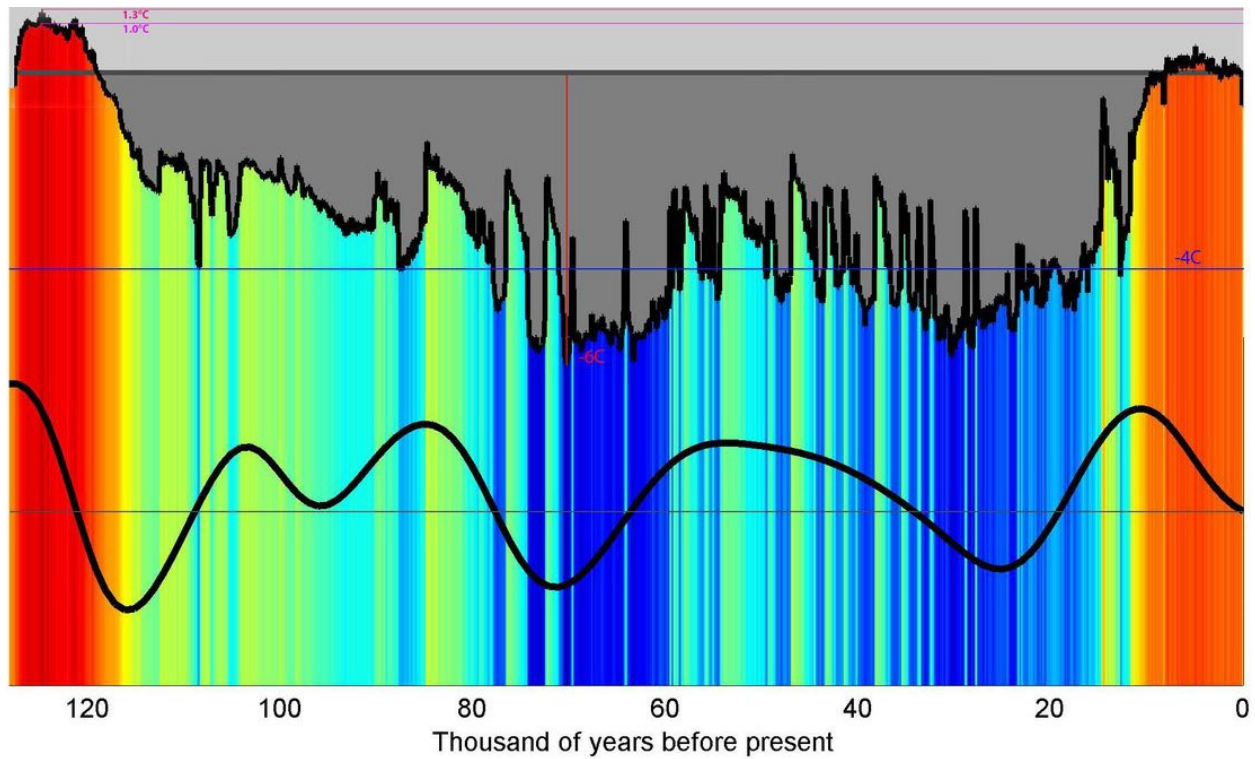
25 July 2023: “\*\*\*WARNING\*\*\*

**MASSIVE FEEDBACK**

**Evidence For Massive Methane Hydrate Destabilization Starting at Only 1.3°C**

The key findings of our study add to a growing body of observational findings strongly supporting the “clathrate gun hypothesis”. The magnitude of intermediate water warming in response to AMOC weakening most likely is critically dependent on the existing mean climatic state. Importantly, the interval we have studied is marked by a mean climate state comparable to future projections of transient global climate warming of 1.3°C to 3.0°C.

We just entered 1.3°C territory as of July.” —[David Ullrich](#): article: [Evidence for massive methane hydrate destabilization during the penultimate interglacial warming](#)



See: methionine

## method

keyword: COBOL reserved word (z/OS)

See: `_METHOD_` — PHP

## method-id

keyword: COBOL reserved word (z/OS)

## Mexico

18 March 2023: “Mexico’s leftist President AMLO held a MASSIVE rally in the heart of Mexico City honoring the 85th anniversary of the state's expropriation of the oil reserves.

He also condemned US politicians who want to invade, stressing that Mexico is sovereign and will never allow it

Speaking in the center of Mexico City, President AMLO denounced “hypocritical” US politicians, declaring:

“Mexico is independent and free, not a US colony or protectorate!”

“We will never, ever let them violate our sovereignty or trample on our dignity!”

This rally was both a celebration of his government and national sovereignty, and a condemnation of US meddling and threats” — [Ben Norton](#); video at [Ben Norton](#)



28 May 2023: “Leaked documents show the US government is angry that Mexico’s left-wing President AMLO is prioritizing social spending to help poor and working people - building infrastructure, raising wages, boosting pensions - instead of spending more on militarization ” — [Benjamin Norton](#)

## Miami

19 July 2023: “Miami has seen 38 straight days of 100°F+ heat indices and counting, obliterating the previous record of 32 days.” — [Colin McCarthy, UC Davis, atmospheric scientist](#)

## mic check

“Pro tip: Patting an active microphone is not a sound check—neither is saying “CHECK, CHECK, CHECK...” Just start singing/playing the loudest/deepest part of whatever you’re about to perform so that the engineer can gain-stage to something appropriate.” —[Eduard the Soundman](#)

## Michigan

Apple blossom is the state flower of Michigan. [University of Illinois](#)

## Mickey Mouse

Mickey Mouse is a beloved animated character created by Walt Disney. He is known for his cheerful personality, mischievous antics, and love of adventure. Throughout his long history, Mickey Mouse has been shown enjoying various hobbies and pastimes.

One of Mickey’s favorite pastimes is undoubtedly spending time with his friends, especially his girlfriend Minnie Mouse. Together, they enjoy dancing, singing, and going on picnics.

Another pastime that Mickey is known to enjoy is playing music. He is often depicted playing a variety of instruments, including the guitar, piano, and drums. He has even led his own band, Mickey Mouse and his Orchestra, in some animated shorts.

Mickey is also known for his love of sports. He has been shown playing various sports, including baseball, football, and golf. In the classic Disney short *The Hockey Champ*, Mickey plays ice hockey and proves to be a talented player despite his small size.

Overall, Mickey Mouse is a well-rounded character with many interests and hobbies. His love of music, sports, and spending time with friends are just a few examples of his favorite pastimes.

[ChatGPT]

## Micron

The Cyberspace Administration of China (CAC) on Sunday told domestic firms that provide “key information infrastructure” to stop buying from Micron. Products of Micron “have serious cybersecurity issues and pose a big risk to the country's key information supply chains, raising

cybersecurity concerns.”

US Commerce Secretary Gina Raimondo said the US “won’t tolerate” China’s decision and said the US is working closely with allies to address the “economic coercion”.

25 May 2023, US Secretary of Commerce Gina Raimondo met with the Chinese Minister of Commerce Wang Wentao in Washington to discuss “issues relating to the US-China commercial relationship,” during which Raimondo claimed to have raised concerns about recent actions taken against American companies operating in China.

According to the *Wall Street Journal*, the Commerce Department stated that it strongly opposes “restrictions that have no basis in fact” as the CAC has offered no explanation for Micron products failing a security review, adding that Secretary Raimondo would be discussing the recent targeting of other US companies in China.

According to the Wall Street Journal, the Commerce Department stated that it strongly opposes “restrictions that have no basis in fact” as the CAC has offered no explanation for Micron products failing a security review.

The chair of the US House of Representatives’ committee on China calling for memory chip maker Changxin Memory Technologies (CXMT) to be added to Washington’s entity list, which imposes restrictions on organizations trading with US companies.

A US response in kind might lead to an escalating series of actions. China’s foreign ministry and commerce ministry are attempting to calm the issue, stating that the Micron ban is an individual case and not the start of a campaign against US companies.

## **microphone technique**





See: **.mid** — file extension

See: **.midi** — file extension

## MidnightBlue

keyword: HTML color name



## miko (shrine maiden)

A miko, or shrine maiden, is a young priestess who works at a Shinto shrine. Miko were once likely seen as shamans, but are understood in modern Japanese culture to be an institutionalized role in daily life, trained to perform tasks, ranging from sacred cleansing to performing the sacred Kagura dance.

The traditional attire of a miko is a pair of red hakama (divided, pleated trousers), a white kosode (a predecessor of the kimono), and some white or red hair ribbons. In Shinto, the color white symbolizes purity. The garment put over the kosode during Kagura dances is called a chihaya.

Traditional miko tools include the Azusa Yumi (“catalpa bow”), the tamagushi (offertory sakaki-tree branches), and the gehobako (a “supernatural box that contains dolls, animal and human skulls and Shinto prayer beads”).

Miko also use bells, drums, candles, gohei, and bowls of rice in ceremonies.

Miko once performed spirit possession and takusen (whereby the possessed person serves as a “medium” (yorimashi) to communicate the divine will or message of that kami or spirit; also included in the category of takusen is “dream revelation” (mukoku), in which a kami appears in a dream to communicate its will) as vocational functions in their service to shrines. As time passed, they left the shrines and began working independently in secular society. In addition to a medium or a miko (or a geki, a male shaman), the site of a takusen may occasionally also be attended by a sayaniwa who interprets the words of the possessed person to make them comprehensible to other people present. Kamigakari and takusen may be passive, when a person speaks after suddenly becoming involuntarily possessed or has a dream revelation; they can also be active,

when spirit possession is induced in a specific person to ascertain the divine will or gain a divine revelation. — [Wikipedia](#)

## Ed Miliband

“While there’s capitalism, there’ll be socialism, because there is always a response to injustice,” —Ed Miliband

## military industrial complex (MIA)

18 March 2023: “The psychopaths running the United States don’t want peace in Ukraine, they want a never ending war so they can continue to feed the bloated military industrial complex.” — [MC Squared](#)

TEXT:

Ahead of Xi-Putin meeting in Moscow, White House rejects cease-fire in Ukraine.



# Ahead of Xi-Putin meeting in Moscow, White House rejects cease-fire in Ukraine

BY LAURA KELLY - 03/17/23 11:35 AM ET

## militocracy

“MILITOCRACY — Government headed by the military leaders and the armed forces in general.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

## milk

US milk is banned in Australia, Canada, the European Union, Japan, and New Zealand because US dairy cows are fed the synthetic Monsanto-invented recombinant bovine growth hormone(rBGH) to increase milk production. This increaes the chances of breast and other cancers.

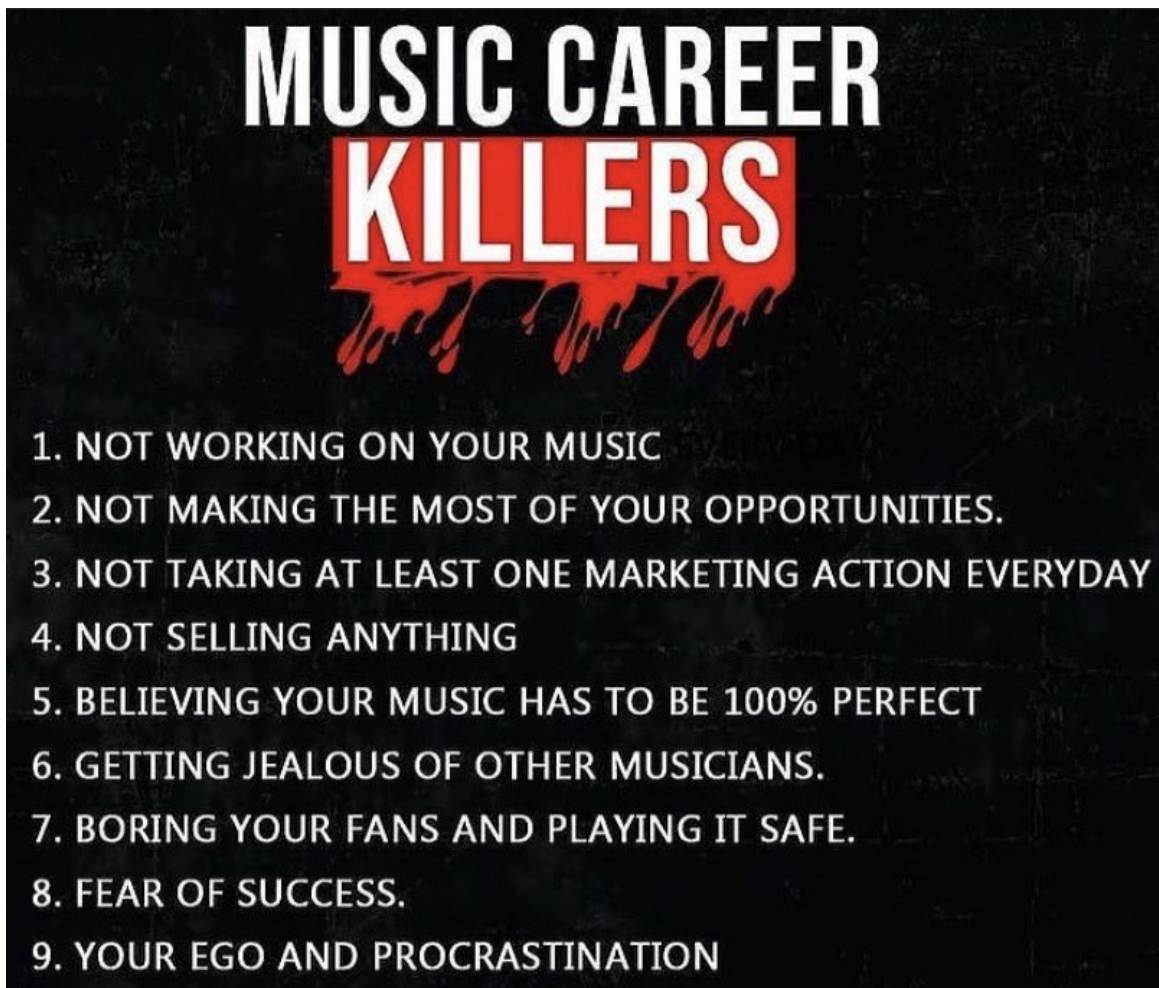
See: cow milk

## min

keyword: SQL reserved word (z/OS)

## mindset

27 September 2023: “mindset cheat sheet” —[Solar Heavy](#)



## General Michael A. Minihan

29 July 2023: “A top US military general ordered the 110,000 troops under his command to prepare for war on China.

He expects the war to start in 2 years.

“Lethality matters most!” Gen. Michael A. Minihan boasted at a conference.

In a fascistic tone, he added: ‘When you can kill your enemy, every part of your life is better! Your food tastes better. Your marriage is stronger’.

Dr. Strangelove was a documentary.” —[Benjamin Norton](#): article: [WashingtonPost.com/national-secur...](#) [paywall warning]

## minimum wage

17 December 2023: “Time for your annual reminder that, according to A Christmas Carol, Bob Cratchit makes 15 shillings a week. Adjusted for inflation, that’s \$530.27/wk, \$27,574/yr, or \$13.50/hr.

Most Americans on minimum wage earn less than a Dickensian allegory for destitution.”

—[Chris Thompson](#)

## MINI-UNIX

operating system

Proprietary OS by Bell Labs.

A version of UNIX Time-Sharing System v6. —[Wikipedia: List of operating systems](#)

**UNIX Time-Sharing System v6**

## Minnesota nuclear power plant leak

18 March 2023: “Nuclear power plant leaked 1.5M litres of radioactive water in Minnesota”

—[Ted Cruz Called The FBI on me](#)

## MintCream

keyword: HTML color name

**MintCream**

#F5FFFA

## minus

keyword: SQL reserved word (Oracle)

## minute



keyword: SQL reserved word (z/OS)

## mlslabel

keyword: SQL reserved word (Oracle)

See: miso soup

## MistyRose

keyword: HTML color name

**MistyRose**  
#FFE4E1

## mixing

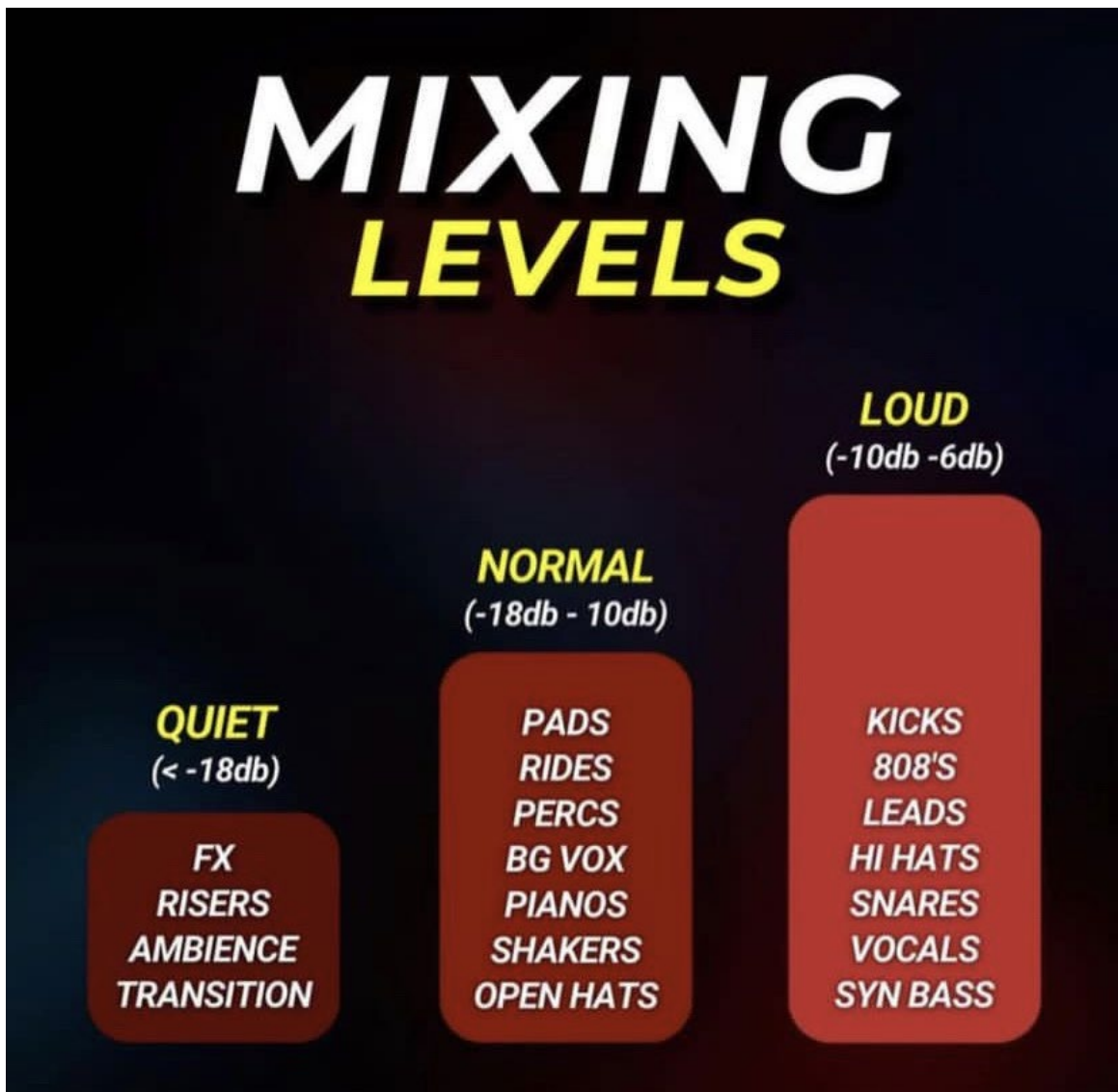
6 September 2023: “mixing cheat sheet” — [Solar Heavy](#)



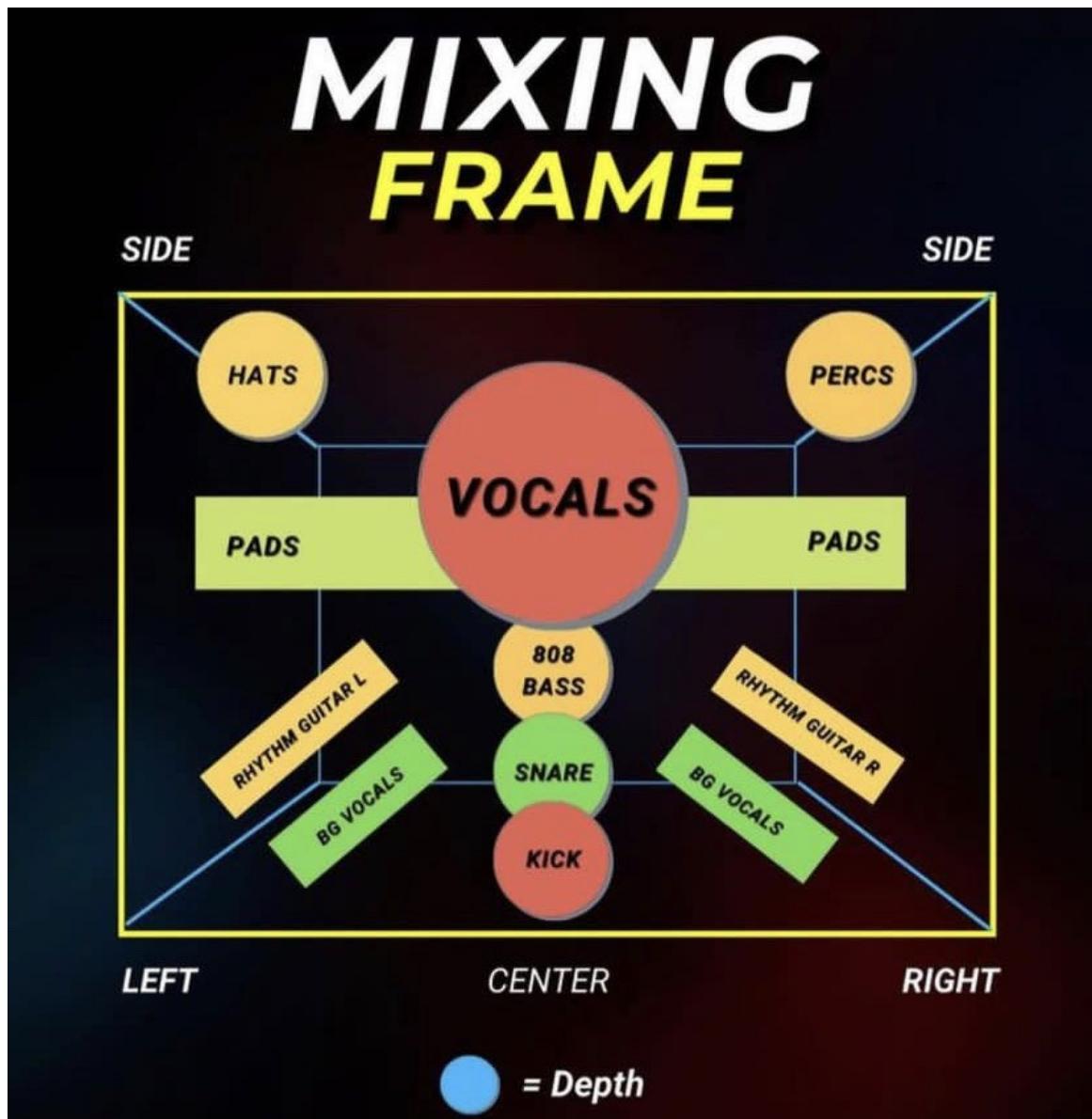
6 September 2023: “Better songwriting isn’t a mixing tip.” —[Sage Greco](#)

6 September 2023: “arrangement/layout can definitely change a mix, specially when it comes to frequency stacking issues and phasing, but I know what you mean lol” —[Solar Heavy](#)

9 September 2023: “mixing cheat sheet” —[Solar Heavy](#)

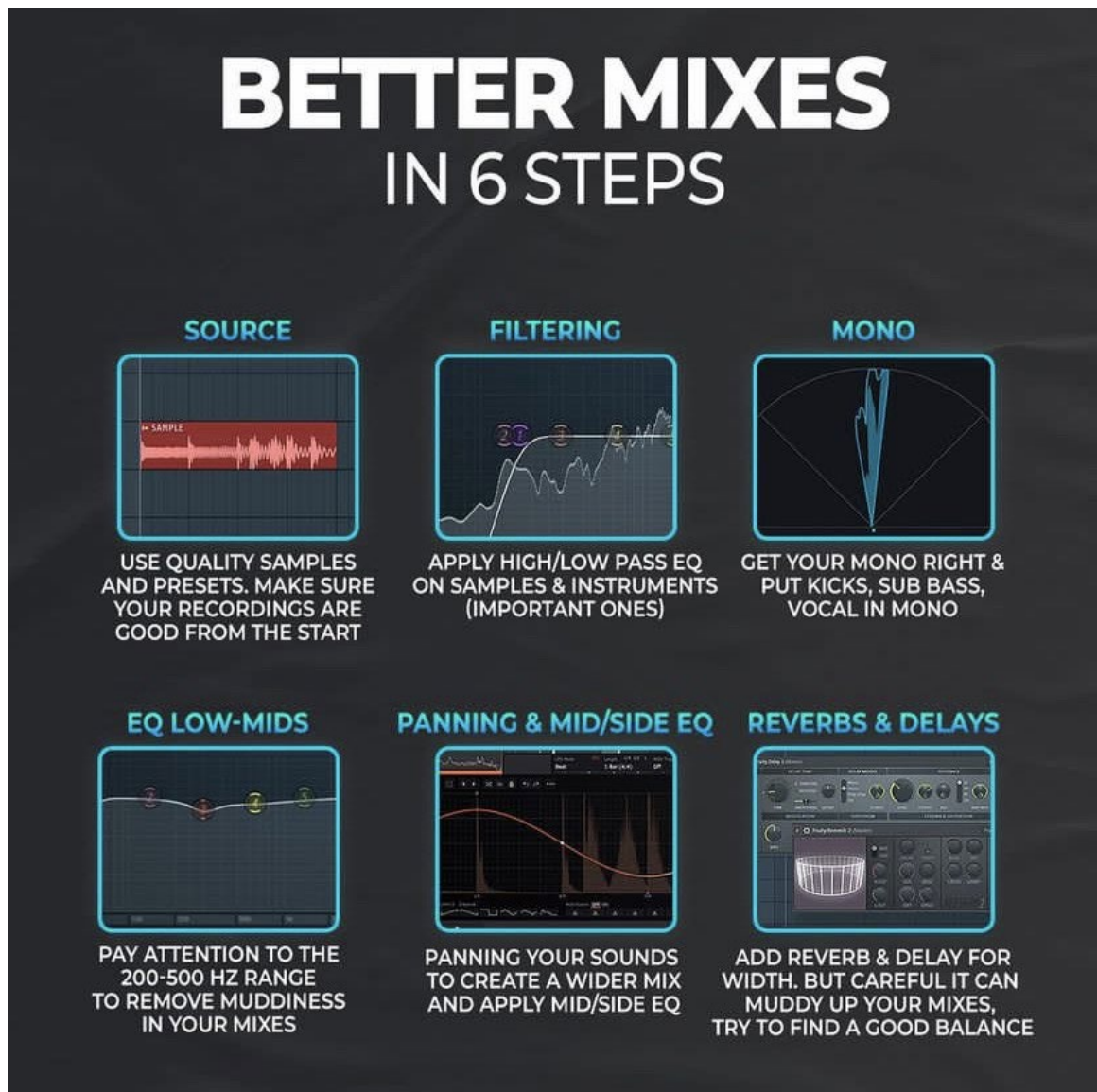


13 September 2023: “mixing cheat sheet” — [Solar Heavy](#)



21 September 2023: “I love that I do everything people say not to do like boost the hell out of my EQs, never bus and add individual reverbs to every single channel, produce mix and master my own music and I just hit 7m streams on spotify as of this month lmao lets go” —[Solar Heavy](#)

26 September 2023: “mixing cheat sheet” —[Solar Heavy](#)



1 October 2023: “mixing cheat sheet

Usually vocals stay centered for me, and then I’ll pan vocal layers to compliment, but mostly it’s good to keep your vocal centered or a little inward to give it a real presence in the spectrum, and try not to have a lot of other sounds in that range if you can” —[Solar Heavy](#)



# MIXING GUIDE



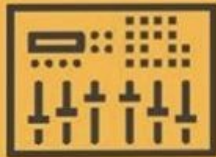
## 1. LEVELING

SET THE VOLUME RIGHT  
BETWEEN SOUNDS



## 3. EQ-ING

EQUALIZE YOUR SOUNDS  
TO PROVIDE ROOM  
FOR EVERY INSTRUMENT



## 5. REVERB

CREATE SPACE, WIDTH  
AND DEPTH TO  
FILL YOUR SOUNDS



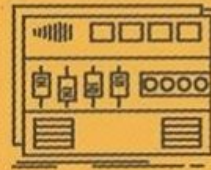
## 2. PANNING

PAN YOUR SOUNDS  
TO CREATE SEPARATION  
IN YOUR MIX



## 4. COMPRESSION

SHAPE THE DYNAMICS  
AND CONTROL LOUDNESS  
OF YOUR INSTRUMENTS



## 6. DELAY

ADD WIDTH, DEPTH AND  
RHYTHM TO FILL THE GAPS

11 October 2023: “mixing cheat sheet” — [Solar Heavy](#)





14 November 2023: "How to get crystal clear highs?"

Steps to get a clean top end for your mixes

First of all, run a session at 48.0 kHz

44.1 kHz is a standard for exporting and listening

But when processing sounds, 48.0 kHz will do better

And it mostly affects the highs.

96.0khz is also great but will require much more cpu.

Use oversampling when saturate

Due to aliasing distortion, your mix will sound dirtier if you don't oversample when saturating sounds

Notice: analog emulation plugins like compressors, eqs also saturate the sound

Especially be careful with boosting top end because that's where aliasing appears the most and makes your song dirtier

Clean the noise from your stems with software like iZotope RX

Tip: Use plugins like RX mouth de click to get rid of unwanted mouth sounds

Use compressor as de esser

It sounds much better than most de essers.

Cut 4-5 khz on sharp sounding sounds

Use smooth top end filters, wide shelf or analog modeled EQs that are designed for boosting top end, like Pultec

Sometimes less is more, and cutting some highs will sounds much better and cleaner

Don't be shy to cut some very top if your mix sounds overly bright

The main reason to do it is when you have many sounds fighting for that spectrum area

Don't overboost highs

One of the most popular rookie mistakes is boost highs a lot and on everything

Keep your mix balanced and not overbright

Cut highs from sounds that are literally don't need it

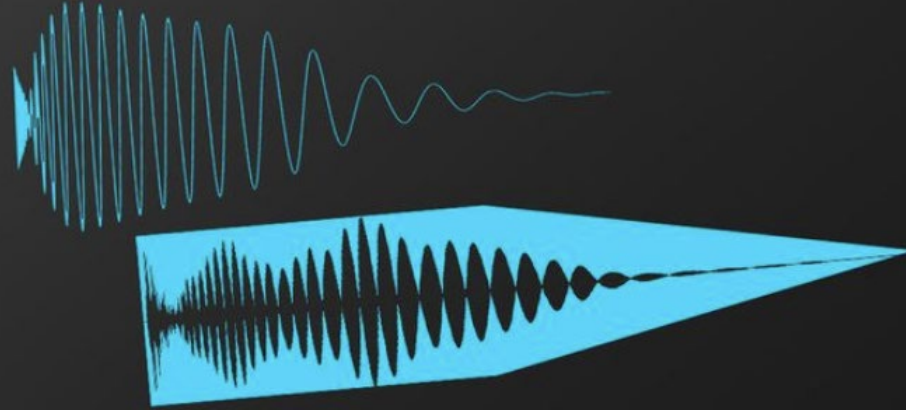
If you only can hear top end on the bass guitar in solo, and don't hear it in the mix anyway, cut it, it only adds dirt

And don't forget that you only can mix something you can hear, if your monitors/headphones are not detailed in highs you can't expect consistently good results in the top end

Happy mixing" —[Nathaniel W.](#)

21 November 2023: "mixing cheat sheet" —[Solar Heavy](#)

# HOW TO MAKE THE KICK CUT THROUGH THE MIX



- Use high quality samples
- Choose the right sample for the genre
- Use soft saturation/distortion
- Apply sidechain compression
- Use a transient shaper

29 November 2023: “Want to massively improve your vocal mixing?

Stop adding plugins on the fly.

1. Create a template with basic aux channels set up. Short reverb, long reverb, all basic delays, chorus, parallel processing.

2. Create a vocal chain where every plugin does its job and turn them on in order.

(I have a few compressors dropped, a few EQs dropped etc, I turn on the ones I want and delete the others)

How you can do it if you are a rookie?

Very simple. Just copy it from any pro, better with explanation on what does each plugin do.

With more experience you will understand how to tweak the template to your needs.

But having a chain with basic understanding of each step helped me drastically when I was learning.

No pro ever starts with empty project and adds plugin after plugin. Every pro has a template.

ÑÑÑÑÑÑÑÑ

The idea behind my vocal chain:

Cleaning, tuning

↓

Preamp

↓

Surgical EQ

↓

Compressors

↓

Coloring EQ

↓

De essing

↓

Final dynamic control

↓

Sends and parallel processing

I rarely use a separate saturator as vocals get enough tone and character from analog modeled EQs and compressors.” —[Nathaniel W.](#)

30 November 2023: “3 keys to a good mix

First is, technical aspect. This is probably the hardest one. Getting your sound right.

Back then, 100% of my brain resources during mixing was wasting on this, and I still couldn't make it right.

If you pleased how your mix sounds technically, the next key is, it should sound different. It should be very interesting and engaging. Like film where things constantly change and always something is happening.

You don't want one scene to last more than certain period of time, which is quite short comparing to the whole composition. Even if it's Hollywood filmed, best film director, your favorite actors, \$100m budget and the best CGI. It all gonna be boring within a few moments. That's the world we live in.

Right now, this is what I focus on immediately. I don't need to focus on getting the sound right, it happens automatically.

From the moment I hit play on your draft, I know exactly how I want it to sound technically, and I focus on imagining the movement. I imagine how the mix will flow, how it should be perceived, what emotions it should cause, how to achieve this. This is what takes my energy now.

Back then I just didn't have the resource left to think about all that artistic stuff. I tried to make it sound the best technically and was tired of the mix to this moment. So I've been exporting the mix forgetting about it until the next revision if there will be.

Now the movement and artistic decisions are my #1 focus in terms of creation and engineering. I not only think how to make it sound good, but both how to make it sound good and make the song come to life at the same time.

Like, what is the idea behind the song? How I can help the artist to make his idea to come true, and how can achieve it both technically and artistically?

And then, after your mix is technically right.. Oh, before you attack me, by right I don't mean the exact right the only way how it should sound. I mean how it should sound from technical perspective, whatever is the genre and the idea.

So after you done with both technical and artistic steps of your mixing process, you need to make this mix translatable to all systems. This is a different topic, but you should do it separately.

The mix and all this stuff you did before will make no sense if it sounds like that only in your conditions.

“Whatever sounds good” doesn't work. What sounds good to you in your conditions may destroy in other conditions. If you have a little bit of experience in sound engineering you know that.

That's it.

Hope it was helpful and you like my long format posts where I share my thoughts. I'm trying to teach you mindset. Not only some tricks.” —[Nathaniel W.](#)

30 November 2023: “Low end inconsistency

The second biggest low end mistake after the amount is its inconsistency

The problem is next:

Each system has its own usable frequency range, from full (like main monitors) to very limited (like a phone)

Speaker can be any size from phone to very big one, and your bass can cut at any note, depending on the speaker size.

The result will be bass that just disappears time to time. Because of the different notes playing and there will be a threshold at some point when speaker can't go lower. This will not sound good in most cases. And it will hurt the listening experience.

(There can be exceptions, when absence of some bass notes sounds natural and not hurting the composition, but it's still have to be heard and controlled, leave it like that should be a decision)

How to deal with the problem?

A good way to fix it is to add harmonics to your bass. Either at the problematic areas using automation, or on a whole bass track.

But most importantly.

How to hear it?

You most likely mix in the headphones or on monitors that go deep as 30 hz at best, 50-60 hz at worst. Actual usable range, not the specifications.

So you hear the sound fuller than most consuming systems. You don't hear how it will sound when bass gonna cut.

Basically there are several ways how you can detect these issues. First one is obvious, if you have multiple speakers of different sizes.

Second is, using headphones and “studio emulations”. Plugins like Waves Abbey Road, DSonic Realphones, Acustica Audio Sienna and so on. These tools can help, but!

You need to remember a few things.

1. With low class headphones the information you will receive will be much less accurate. Can it hurt your mix? I don't know exactly but possibly, I never tried anything like that with cheap headphones.

2. You can't just switch presets and think you getting useful info. You need to reference these systems and presets first, play some songs you know, learn it. Play your mixes, especially if you know that there are problems (you heard them in a car for example). And try to find presets that show these problems. Compare to references. Make sure references sound clean and well on that.



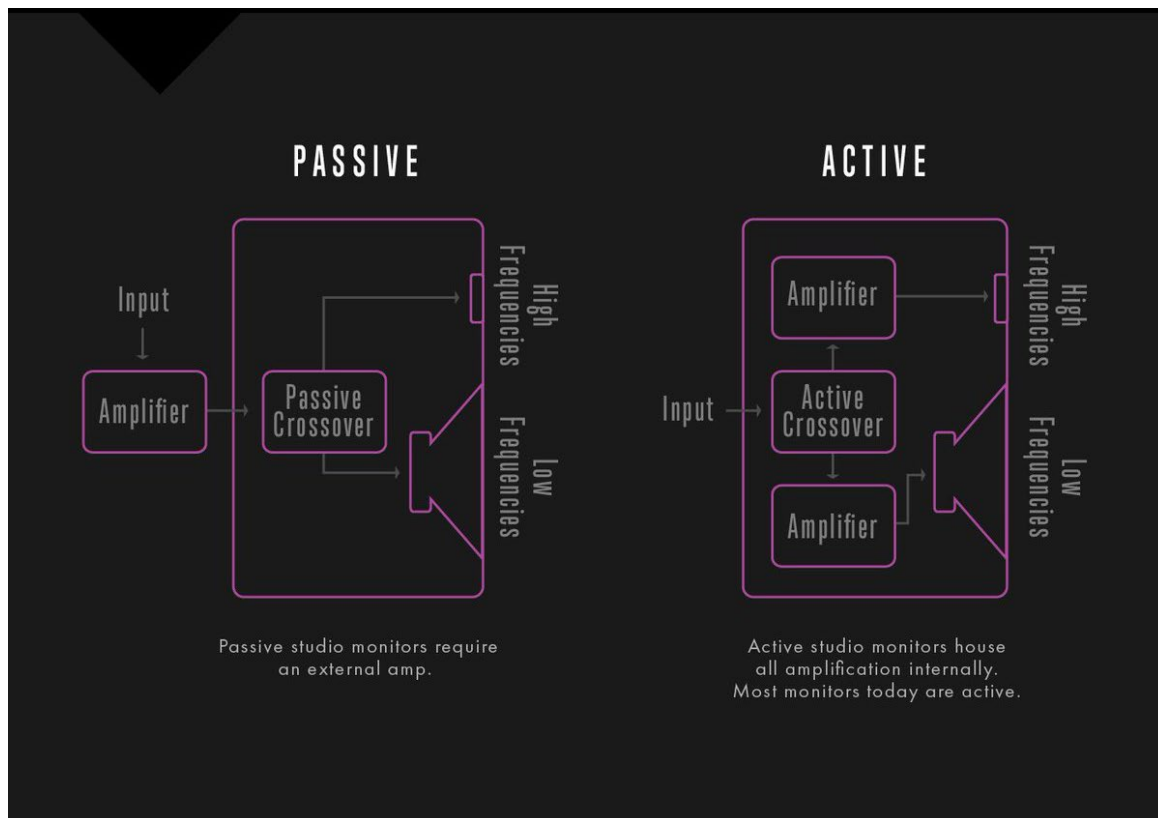
And so on. Only then these plugins can be useful.

Remember that you can't emulate another speaker completely, don't rely on these 100%, but we talking about inconsistent low end now, and these definitely can help with fixing it.

Third way, if you don't have any of these tools, try to monitor your mix highpassed. Like at 50 hz, at 80 hz, at 120 hz. And make sure your low end never "disappears". Of course some lower notes won't be audible, but the sense of bass playing can be achieved without the actual notes, but using the harmonics. Control it as we spoke earlier.

Try to find balance between good translation and not changing the bass tone too much, which I assume you like." — [Nathaniel W.](#)

1 December 2023: "Passive vs Active monitors" — [Nathaniel W](#)



1 December 2023: "Pro vocal mixing tip

You can try automating the high frequency shelf with analog modeled EQ, slightly increasing the high end only during the hook

Giving some extra excitement and movement to your song" — [Nathaniel W.](#)

1 December 2023: "When artist sends me a song, and it's:

- With BPM and key included
- In a single ZIP archive
- With beat stems
- Properly named
- 24 bit depth

Appreciate them

[Why 24 bit?] Gives more headroom to play with channels level without bringing up the



noise” —[Nathanial W.](#)

3 December 2023: “Pro tip: A good mix is cohesive without sounding flat, and should dynamically highlight each instrument’s musicality in ways that keep the listener engaged—all without distracting from the inherent appeal of the song as a whole. A good mix is certain, but does not expose itself.” —[Eduard](#)

3 December 2023: “Pro vocal mixing tip

If you have a few analog modeled compressors and EQ in the chain, they saturate sound pretty well.

Most likely you don’t need another saturator.

LA-2A and 1176 are classic for mixing vocals

There are a lot of emulations of these by different manufacturers” —[Nathanial W.](#)

4 December 2023: “If you wanna “et better at mixing, don’t get hung-up on or kid yourself with “perfection”—learn to commit, finish fast, and move on. Each mix will be better than the last, and you’ll make gains faster than you would from fucking around with the in-between bullshit. Get to work!” —[Eduard](#)

4 December 2023: “Clipper vs Limiter

- What is the difference?
- When used?
- Soft Clipper vs Hard Clipper

A clipper and a limiter are both audio processing tools, but they serve different purposes.

A clipper is designed to intentionally clip or distort the audio signal, adding harmonics and altering the waveform.

• It’s often used creatively for distortion effects.

A limiter is used to prevent the audio signal from exceeding a specified threshold, controlling the dynamic range and avoiding distortion.

It’s commonly used in mastering to ensure that the overall loudness remains consistent without clipping.

Use a clipper for intentional distortion or creative effects, while a limiter is for controlling peaks and maintaining a balanced audio output.

~~~~~

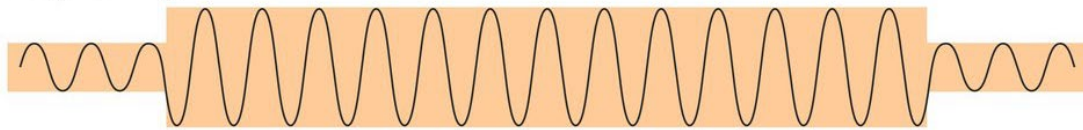
Soft Clipper vs Hard Clipper

☑ A soft clipper introduces gradual distortion, rounding off the waveform peaks, resulting in a smoother sound.

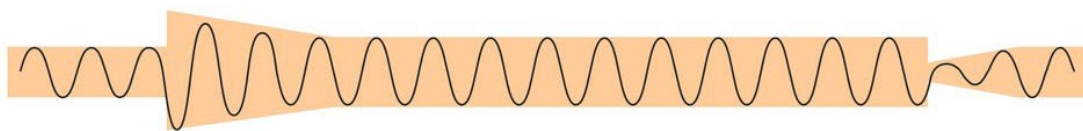
It tends to preserve more of the original tone while adding a subtle edge.

☑ A hard clipper creates a more aggressive, gritty distortion with sharper cutoffs, often producing a harsher and more noticeable distortion effect, suitable for certain genres or creative audio applications.” —[Nathanaiel W.](#)

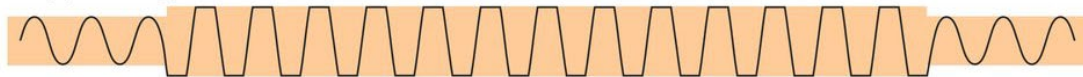
Original Signal



Limited Signal



Clipped Signal



4 December 2023: “In my process limiters are not for maintaining a balanced audio output. Thats what the volume faders and gain stage is for. Limiter is just the cap at the end.” —[prophet](#)

4 December 2023: “If you wanna get better at mixing try this.

Limit yourself to 5 plugins.

Pick 1 EQ, 1 Compressor, 1 Saturation plugin, 1 Reverb, and 1 Delay.

That’s all you really need.” —[Gio](#)

4 December 2023: “if you wanna get better at mixing try learning mixing fundamentals, reading your manuals, studying great sounding mixes, practice frequency ear training, compare your mix to hit records, learn your equipment...truth is there isn’t a quick way to get good at mixing it takes years” —[JUSTIN](#)

4 December 2023: “With all the manuals and fundamentals and study and ear training and equipment learning and 5 plugins self-limitations, you won’t get better at mixing if you don’t actually mix at least a couple hundreds songs. If you want to get better at mixing, try actually mixing” —[THESIMPLETOM](#)

4 December 2023: “didn’t this tweet imply that you would be mixing lol” —[JUSTIN](#)

4 December 2023: “Pro vocal mixing tip

You can try using a compressor like Pro-C 2 for a final dynamic control, in close to limiting settings

But!

Increase the midrange area a bit on the internal sidechain EQ

Probably around 1-2 kHz, but may vary

This will allow you to control your vocals while also provide some extra control in the area that is most audible and can “jump off” the mix.

Yet without changing the spectral balance, as Pro-C will tame the whole signal.

This compression should be very subtle and applied to louder parts of your vocals. With small gain reduction. Make sure it doesn't work consistently and aggressively.” —[Nathaniel W.](#)



4 December 2023: “I do this but earlier in the chain but not limiting settings only about -3db reduction also controlling the wet and dry makeup gain makes it sound more natural. It doesn't work on every mix tho.” —[JUSTIN](#)

5 December 2023: “Pro mastering tip

Use spectral analyzers that allow to see multiple spectrums (like in Pro Q-3) and compare frequency balance of your song to the reference

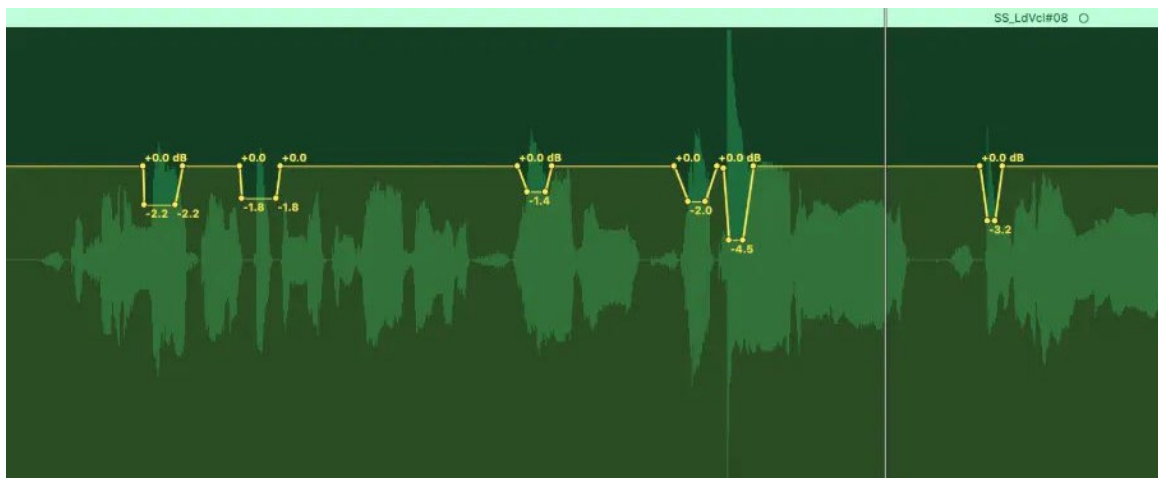
I use Voxengo Span Plus for that.” —[Nathaniel W.](#)

6 December 2023: “Why your vocals don't sit in the beat?

Because you (probably) doing it wrong initially. You rely on your compressors.

But your vocals should already sit in the mix before compression

How? Clip gain automation.” —[Nathaniel W.](#)



6 December 2023: “Is the vocal rider plug-in better than no clip gain automation?” —[Khy](#)

6 December 2023: “On some vocals may be. That are not too dynamic.

If you hear it working then it makes worse. If it works transparently and level is more balanced now then it became better.” —[Nathaniel W.](#)

9 December 2023: “Pro tip: Test on phone speakers to get a better idea of how your master will translate to people who don’t like music.” —[Eduard](#)

15 December 2023: “Pro mixing tip

Try using “multiband transient shaping.”

By using it, you can independently control the attack and sustain of different frequency bands in your sounds.

This method allows precise shaping of each element’s transients.

You can sculpt the overall dynamics and impact of individual instruments.

I currently use Slate Digital transient shaper, and I stack them into a rack, giving each instance a different range to operate in (picture below, see how “focus” is set differently)

Sometimes I use it broadband of course, but here we talking about the multiband approach. I can use 2 instances for low and high frequency transients. I can use 3 to treat the low/sub bass punch differently as well.

“oeksound spiff” is another great tool to do that.

Last time I did that when I mixed to a two track beat. (Yeah I received plenty of those on my \$100/song deal, it’s still valid by the way)

I couldn’t mix the drums because the beat was mixed so I used a few transient shapers to adjust kick and hi hat/snare punch separately.

Song really came alive and became more engaging.” —[Nathaniel W.](#)



18 December 2023: “Pro mixing tip

We all know about using transient shapers on drums

But have you thought about using it on pianos, guitars etc?

Emphasizing notes attacks, string pulls, key pressings.

This can really improve “life” of your sounds. This what causes goosebumps if done right.

Right now I’m on Slate Digital transient shaper and like how it sounds very much”

—[Nathaniel W.](#)

22 December 2023: “General idea behind mixing chains

One thing to keep it mind. Analog modeled compressors and “character (=coloring)” EQs already saturate the sound

So be careful with further coloring” —[Nathaniel W.](#)



22 December 2023: “Pro mixing tip

A lot of times upcoming engineers pay huge attention to vocals and mix their instruments like “whatever”

Instruments are important too

They also need a good approach, editing, taking care of their interactions, a good chain, automations etc” — [Nathaniel W.](#)

23 December 2023: “Mixing in mono

- What is it?
- Why is it important?

Mixing in mono is a technique when you mix while monitoring your mix in mono.

Some people think it helps with mono compatibility only. Making sure your mix will sound good on mono speakers.

But it is not true!

While it is definitely helpful to make your mix sounding better on mono speakers, there are a few other, very big reasons to do it.

#1

When you hear your mix in stereo you less understand the actual depth of your mix

Depth means closer/farther, not left right.

You are too distracted by width that it is really hard to tell how much 3D space your mix has

Turning on the mono allows you to understand better if your space is not flat, and really has the depth.

#2

Listening in stereo, you less understand if some sounds fight for the same frequency area.

Imagine you have a shaker and a hat, one is more left and one is more right

You can not hear the conflict because they play from different spots on the virtual scene.

But as soon as you turn on mono you realize they sound very identical spectrum wise and you need to make them more different

Do not allow different sounds to sound similar.

In most cases it creates a mess. Exception is only if it's the artistic solution and the groove between sounds matches perfectly.

#3

Same with dynamics and levels. When your mix sounds wide it's much harder to tell which sounds trying to overpower each other dynamically, while in mono it's really obvious

And of course, when you notice that some of your sounds disappear in mono or become much quieter, it's a reason to think if you widened some of your sounds too hard with some "imager", and narrow them a bit.

This will make your mix mono compatible.

Some people will say "who cares about mono nowadays?".

But any pro will say, mono compatible mix sounds better in stereo too.

You can widen your sounds pretty hard without losing mono compatibility, but it's a whole another story.

In conclusion, don't forget to switch between mono/stereo monitoring while working."

—[Nathaniel W.](#)

23 December 2023: "Better low end with smaller monitors/headphones

Most likely, you don't have a giant full range system that will allow you to hear perfectly how much sub bass do you have in your mixes.

Here is a trick what you can do:

- Get a song from the artist you like, in a same genre, preferably with similar sounding bass on your speakers/headphones

- Load up the spectrum analyzer, and just see how much sub bass does the song have

Tip: you can use Pro-Q 3 on your master and on the reference, to monitor two spectrums at once

- Use an equalizer to match the amount of sub frequencies" —[Nathaniel W.](#)

24 December 2023: "mixing cheat sheet" —[Solar Heavy](#)



24 December 2023: “What’s a static mix?

+ 1 technique how to achieve a good static mix

Static mix is a rough mix that is done on the first step of mixing. It is done by using only level and pan.

The purpose of it is to set the balancing, to have a good understanding of what you going to work with, and hear all of the potential problems.

It is important to do it before reaching out to EQs and compressors, because you don't want to process sounds for no reason.

Only if it doesn’t sound right in a good static mix, then it gets fixed with further processing.

Technique to get a good static mix

1. Move all your faders (physically or in a DAW, doesn’t matter) all the way down

2. Start bringing your sounds up, one by one.

3. Usually I start with kick, bass, snare, rest of the drums. Then melody, from most important instruments to least important. Then vocals. From lead, to doubles, and then adlibs.

Sculpt your mix by yourself. When you hear everything together from the beginning, you will

more likely miss something, distracted by all variety of sounds.” —[Nathaniel W.](#)

26 December 2023: “Pro mixing tip

If something sounds technically clean, where it shouldn't stylistically sound clean

We consider that a mistake.

Do not think that engineers are obsessed to make everything sterile.

We want people to enjoy your songs.” —[Nathaniel W.](#)

26 December 2023: “It's always a conscious choice of mine to make something sound clean or dirty. There is no default.” —[S7EWAR7 7U77LE](#)

27 December 2023: “Frequent mixing mistake

This mixing mistake ruins both mixes and then masters.

Here is the thing. You may like your kick in solo but in the mix it becomes much less noticeable and you don't get enough punch out of it.

What people start to do?

They start increasing the kick level, or reach out to transient shaper, or compressor, trying to get more punch out of it.

But they totally forget that the punch in solo is there. And if it's there, it's there.

You lose it in the mix not because of the kick, but because of other instruments. Kick can conflict with pretty much any instrument or even vocals.

Carve out more space for it. Sidechain more sounds from kick, let it breath.

It is a low frequency sound which already needs more loudness to perceive well enough since we hear low frequencies much worse.

When you try to increase the kick level trying to overpower everything, you make it much louder than other sounds. To the point where balance is destroyed.

And while it may sound good in the moment, your limiter will react to this kick very heavily during mastering, that will lead to pumping and hard limitations in terms of how much loudness you will get out of your mix.

It also will reduce the translation of the mix, it can get totally destroyed on other systems.

Conclusion: make sure your kick sounds the same in solo and in the mix. And if it's not, fix it by carving out the space for it.

Check your mixes. I'm almost sure you will hear this problem if you didn't pay specific attention to it.

Follow me for more daily mixing tips @natemixing” —[Nathaniel W.](#)

28 December 2023: “Mixing songs with live instruments and drums is my favorite thing

It is much harder than electronic music.

Each slightest knob turn can ruin the mix. You need to be super careful.

Been working on one today.

I've been setting up the reverb for about 20-25 minutes for one instrument, three times for different ones. And for vocals separately.

I've been picking the preamp and compressor for vocals. Literally most just didn't work.

Finally used the Avalon, and the compressor was STA-Level. It went to Hitsville EQ which is

one of my go to vocal EQs. It sounds so amazing and works in many scenarios for me.

A few instances of Lexicon 480 reverb on sends and 1176 in parallel, with Roland Dimension D chorus on another send.

Making each instrument to have its role while supporting other instruments, and then making a different exciting hook without ruining the mix, is a much more challenging task when you work with live sounds.

But on songs like this engineers skills are tested the most.” —[Nathaniel W.](#)

29 December 2023: “mixdown cheat sheet” —[Solar Heavy](#)

MIXDOWN CHECKLIST

MAKE SURE YOUR TRACK IS READY FOR MIXDOWN

LEVELS



1. no clipping

are there any red lights on any channel?



2. headroom

is there about 3 - 6 dB headroom?



3. dynamics

are there any sudden, unwanted level changes?

CRITICAL LISTENING



6. reference

is the sound close enough to my reference track?



5. priorities

are the most important instruments the loudest?



4. clarity

are all instruments clearly audible?

SAFETY PRECAUTIONS



7. high-pass

does every instrument make way for the kick and bass?



8. limiting

does any instrument need more limiting?



9. signal path

does every mixing technique I applied support my vision?



audio mixdown
check waveform

29 December 2023: “Better mixing decisions

How often there were cases where you didn't hear what your plugin does? And if it actually improves the sound?

Or, you get tricked by brain when turning on the plugin, because lights turn on, meters jumping, and you are sure that the sound became better

Actually brain can trick us into thinking it's better, but in reality it is not, and what you “hear” is a placebo.

There is a small technique to avoid this, and I know pro engineers who do it after adding every plugin

You close your eyes and click bypass a few times to not know if your plugin is bypassed.

Then clicking bypass again a few times, still with closed eyes, trying to understand in which state it sounds better. (Level match the output of a plugin for fair comparison)

Trust me, you will find yourself choosing sound without a plugin much more often than you think.” —[Nathaniel W.](#)

1 January 2024: “Pro mixing tip

I realized that when I mix music, I don't just apply million techniques I learned.

For many songs, I develop new techniques specifically. Later I can use it for other songs.

Today's technique I made:

1. Loaded HG2-MS and made a saturation with emphasized side saturation with slightly increased output.

2. Automated this to turn on the hook only.

Sounded very dope and interesting” —[Nathaniel W.](#)



2 January 2024: “Adlibs mixing tip

When I want my adlibs to sound with very heavy distortion, to the point when they sound similar to guitar

In many cases I use Fabfilter Saturn, preset called “Fuzzy Midrange” in “aggressive” folder, and then I use mix knob to taste” — [Nathaniel W.](#)



3 January 2024: “Pro tip: Internet graphics that “sound good” don’t always sound good. Beware of such dull regurgitations” — [Eduard](#)

To be clear: the technique itself is ham-fisted for many reasons. For one, focused EQ on the low-end alters the phase-relationship between kick and bass, and unequipped ears will let it pass unnoticed. Sidechain techniques suffer from the same (as well as other) complications...



12 January 2024: "Mixing without beat stems

If you have only a mixed beat and vocal tracks, here are my advices to make your mix better:

1. First of all, process the beat. Understand if it has any problems and fix them. Tonal balance, punch, piercing sounds. Make it sound the best in solo.
2. When you will be mixing it with the vocals, you still can sidechain vocals from the low end, using soothe2 or multiband compressor. Below 200 hz.
3. You can sidechain vocals from the snare, using 3000-4500 hz range. To give snare space and not overlap with vocals creating unpleasant sound.
4. If you sidechain the beat from vocals, use slower settings to not get your drums compressed.
5. If your beat has 0 dbfs peak level turn it down before mixing to your normal working level. Other than that, mix like you would do it with stems. And try to get the best results."

—[Nathaniel W.](#)

18 January 2024: “Most important mixing tip

Literally, you will never become good at mixing without understanding this.

Get rid of the idea that it is possible to watch some tutorials on vocal mixing, read some of my tweets on vocal mixing, look up for some chains and start making actually good mixes

It's like trying to become good at basketball by going out and just shooting the ball. Yes, in the end scoring is the most important part and who scores the most wins. But soon as the game begin, you will score nothing and be the most useless player, if you never actually practiced the game of basketball.

The rules, how to dribble, how to pass, tactics, strength, speed, team play, fake moves, tricks, shooting under pressure etc.

Yes you can have strong sides, there is no perfect player. But if you ONLY practice shooting with yourself, you won't become any good at basketball. Probably you will win against people in your neighborhood who never held the ball.

Sooner you will understand that this concept is a total nonsense, sooner you will become good at mixing

(Don't think I was different, I was thinking the same)

You will save years if you won't take that route. I didn't have a guy who would told me that. Everyone is happy to get massive engagement and attention by posting chains and presets that just don't work and won't make you any better.” —[Nathaniel W.](#)

21 January 2024: “Pro mixing tip

Don't just mix in solo and check in a whole mix.

Mix in the context.

Don't be afraid of EQing a single track while listening the whole mix.

Instruments and their frequencies sum in a very complex way. You can't predict how sounds will sum up.

So hearing the result and adjusting it on the go is a great way to get a great end result.”

—[Nathaniel W.](#)

27 January 2024: “Why your mixes are not loud?

If you have opportunity to tame the loud peaks on individual channels without distorting them, DO IT

Why would you need those peaks to trigger limiter and tame your sounds all together?

If your mix have those peaks you don't have a choice but push them into limiter

And what would sound cleaner?

- Limiting only them individually.
- Limiting the whole mix because of them.

Obviously first.

You don't want your limiter to fall into -6 gain reduction for the whole mix when it can be done only to the sound that caused these peaks.

So control the peaks on individual channels as much as possible.

Only then push it to the limiter to get maximum loudness


That way, you will have way more headroom to do it, hence get more loudness out of your mix.” —[Nathaniel W.](#)

MkLinux

operating system

Proprietary OS by Apple for the Apple Macintosh.

Apple Macintosh

See: .mkv  — file extension

MLYACC

abbreviation

programming language

‘

MLYACC - Implementation and output in SML/NJ
ftp://research.att.com/dist/ml/75.tools.tar.Z

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

yacc

Moccasin

keyword: HTML color name



Moccasin

#FFE4B5

Operation Mockingbird

“In the 1950s the CIA launched “Operation Mockingbird” to build anticommunist fervor at home and abroad. For decades they paid US newspapers & wire services to present its doctored versions of news stories.

That stuff is one reason the word “socialism” still scares people today.” —[Eric Saeger](#)

House of Moctezuma

“If we are talking native bloodlines can we spare a second to recognize the fact that House of Moctezuma survived the Aztec Empire’s fall & became a recognized Spanish noble house. History is weird” —[Blake Allen](#)

mod

keyword: Ada reserved key word

keyword: VHDL reserved key word

mode

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

modify

keyword: SQL reserved word (Oracle)

module

keyword: Ruby reserved word

modules

keyword: COBOL reserved word (z/OS)

monarchy

“MONARCHY — Government by a single sovereign, usually hereditary, whether an absolute ruler or with power limited in some form (such as the English monarchs, limited in rule by the Magna Carta.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

money supply

“Give me control of a nation’s money supply, and I care not who makes its own laws.” —Mayer Amschel Rothschild

Mongolia

29 December 2023: “The Mongolian Flag has three, equal vertical bands of red (on the hoist side), blue, and red. Centered on the hoist-side red band in yellow is the national emblem, a “soyombo,” which is a columnar arrangement of abstract and geometric symbols and patterns representing fire, the sun, the moon, the earth, water, and the yin-yang symbol. Blue represents the sky and red signifies progress and prosperity.” —CIA World Factbook (material that expires after 30 days)

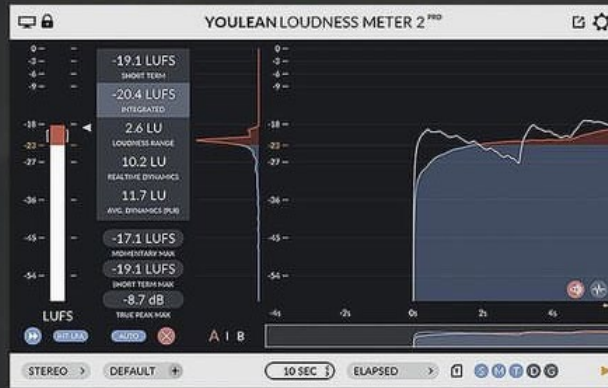


monitors

10 September 2023: “plugin cheat sheet” — [Solar Heavy](#)

FREE MONITORING PLUGINS ⁽¹⁾

1. YOULEAN LOUDNESS METER



Loudness metering plugin (LUFS, LRA, DR and true peak)

2. SPAN BY VOXENGO



Spectrum analyzer

19 September 2023: “gear cheat sheet” — [Solar Heavy](#)



19 September 2023: “I added a psw10 sub with mine, which has a built in crossover so I dialed it in and bypass the sub with an on/off switch when needed. I prefer the dialed in sub at a very low volume just to fill in that lower registry since the hs7’s are very balanced” —[Solar Heavy](#)

17 November 2023: “size matters cheat sheet” —[Solar Heavy](#)



11 December 2023: “Equipment tip

Don’t use light monitor stands.

They will vibrate and add muddiness to your sound, acting like a passive speaker.

(Furniture vibrations transform to sound just like speaker vibrations, but imagine the quality of it)

Use stands that are really heavy. Those usually can fit some heavy material inside. Often sand is used.

You can see their rectangle form, which is allowing to fill them with something.

You can make DIY stands from a few pieces of wood and fill it with sand

This will be cheaper and infinitely better than those cheapest “singing” stands.

Hard construction will prevent unnecessary vibrations and keep your sound much more clean.

This is really important as it affects the upper bass - low midrange area, that is crucial to monitor well for achieving a great mix.

Using monitors on the table is a very compromise solution (unless it’s an additional control). Good stands are much better.” —[Nathaneil W.](#)

mono

23 December 2023: “Mixing in mono

- What is it?
- Why is it important?

Mixing in mono is a technique when you mixing while monitoring your mix in mono.

Some people think it helps with mono compatibility only. Making sure your mix will sound good on mono speakers.

But it is not true!

While it is definitely helpful to make your mix sounding better on mono speakers, there are a few other, very big reasons to do it.

#1

When you hear your mix in stereo you less understand the actual depth of your mix

Depth means closer/farther, not left right.

You are too distracted by width that it is really hard to tell how much 3D space your mix has

Turning on the mono allows you to understand better if your space is not flat, and really has the depth.

#2

Listening in stereo, you less understand if some sounds fight for the same frequency area.

Imagine you have a shaker and a hat, one is more left and one is more right

You can not hear the conflict because they play from different spots on the virtual scene.

But as soon as you turn on mono you realize they sound very identical spectrum wise and you need to make them more different

Do not allow different sounds to sound similar.

In most cases it creates a mess. Exception is only if it's the artistic solution and the groove between sounds matches perfectly.

#3

Same with dynamics and levels. When your mix sounds wide it's much harder to tell which sounds trying to overpower each other dynamically, while in mono it's really obvious

And of course, when you notice that some of your sounds disappear in mono or become much quieter, it's a reason to think if you widened some of your sounds too hard with some “imager”, and narrow them a bit.

This will make your mix mono compatible.

Some people will say “who cares about mono nowadays?”.

But any pro will say, mono compatible mix sounds better in stereo too.

You can widen your sounds pretty hard without losing mono compatibility, but it's a whole another story.

In conclusion, don't forget to switch between mono/stereo monitoring while working.”

—[Nathaniel W.](#)

month

keyword: SQL reserved word (z/OS)

Moog

22 September 2023: “inMusic Fired Moog Staff

There is no official press release from Moog or inMusic yet. However, according to ex-employees, many Moog employees in Asheville were fired today. Adam Strange, a former instructor at Moog says: “Moog just fired everybody, it was a good run. Game over.”

Anotehr person writes: “Moog about to change for ever, a sad day for their team and all of us.” According to the post, the “Asheville location will remain open for now, only making a limited number of higher-end products but the majority will be made oversease and of lower quality.” ” —[Ed the Soundman](#)

Moon

23 August 2023: India became the fourth nation to land on the Moon (after the US, Soviet Union, and China) at 6:04 pm in India on 23 August 2023. The Chandrayaan-3 landed near the Moon’s south pole and released a rover. Russia’s Luna 25 also intended ot land near the Moon’s south pole spun into an uncontrolled orbit and crashed 20 August 2023.

moonquake

The Moon’s equivalent to an earthquake.

Moor

Moor is someone from north Africa.

1 January 2024: “The Annual Festival of the Moors occurs every year in Spain [the 25th and 26th of July] where they have a big event Celebrating the Reconquista, when they finally kicked the BlackaMoors out of Spain after 700 years.” —[Typical African](#)

Moors

The Latin word “Maurus” (masculine), “Maura” (feminine), and “Maurum” (neuter), source of modern English word “Moors”, literally means “dark-skinned”.

more-labels

keyword: COBOL reserved word (z/OS)

Morocco

19 March 2023: “A Catalan delegation has been in Sahrawi refugee camps in Algeria to demand more aid for Western Sahara, a disputed territory claimed by Morocco

“This should have been resolved 32 years ago with a referendum on self-determination” ”

—[Catalan News](#) [includes video]

mortgage

The word mortgage comes from the Old French *mort* meaning death and the word *gage* meaning pledge.

MOS

abbreviation

operating system

Proprietary OS by Acorn Computers

motmot

9 January 2024: “Trinidad Motmots, known for their colorful plumage and long tails, reside in the interior of lowland evergreen forests on Trinidad. Active in the early morning and the late afternoon, they feed on small prey such as insects and lizards, as well as fruit. Motmots breed during the rainy season and, during courtship, the male offers flowers, leaves, twigs, or grass to the female.” —CIA World Factbook (material that expires after 30 days)



Mountain Dew

Mountain Dew was banned in the European Union and Japan because it contained Brominated Vegetable Oil (BVO), Bromine, an element used in flame retardants, can cause a number of health problems, including headaches, memory loss, impaired balance, and impaired coordination.

Mountain Valley Pipeline

“page 95 - the bill’s approval for Mountain Valley Pipeline, a big natural gas project that Manchin has championed” —[Jeff Stein](#) Copy of the bill: [118hrPIH-fiscalresponsibility](#)

“Biden just sold out Appalachia to allow the dangerous Mountain Valley Pipeline—a ticking time [bomb] being placed across the steepest slopes in America across the Appalachian trail.” —[Jordan Chariton](#) [28 May 2023]

Mount Roraima

“Mount Roraima and the other tabletop mountains in Canaima National Park are considered to be the oldest geological formations on Earth, dating back around two billion years to the Precambrian Era” —[Massimo](#)

See: .mov  — file extension

move

keyword: COBOL reserved word (z/OS)

See: .mp3  — file extension

See: .mp4  — file extension

See: .mpa — file extension


MP/AOS

abbreviation

operating system

Proprietary OS by Data General.

For Data General micorNOVA-based computers. —[Wikipedia: List of operating systems](#)

See: .mpeg  — file extension

See: .mpg  — file extension

MP/M

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

Multi-user version of CP/M-80 — [Wikipedia: List of operating systems](#)

CP/M

MP/M II

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

Multi-user version of CP/M-80 — [Wikipedia: List of operating systems](#)

CP/M

MP/M 8-16

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

a dual-processor variant of MP/M for 8086 and 8080 CPUs. — [Wikipedia: List of operating systems](#)

CP/M

MP/M-86

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

Multi-user version of CP/M-86 — [Wikipedia: List of operating systems](#)

CP/M

MrBeast

3:17 am 14 July 2023: “Whoever has the most liked reply to this in 48 hours gets all my Twitter revenue for the next month!” — [MrBeast](#)

This rich person knows that the Twitter algorithm was changed to promote the tweets of rich people and to bury the tweets by poor people. He knows that he will be handing his money to a fellow rich person.

And if he wants to deny that he has deep hatred against the elderly, working poor, and homeless, I will gladly add his reply here.

mRNA

“Messenger RNA (mRNA) is in every cell in your body. It assists in the creation of proteins by translating your DNA into a recipe for manufacturing amino acid chains your body can use. It's a good thing” — [Stephanie Voltolin](#)

See: .mrw  — file extension

See: .msg — file extension

MSP

abbreviation

operating system

Proprietary OS by Fujitsu

MSP-EX

abbreviation

operating system

Proprietary OS by Fujitsu

See:  — file extension

mug

The first known mug was made from bone.

Mulford Act

“The Mulford Act was a 1967 California bill that prohibited public carrying of loaded firearms without a permit. Named after Republican assemblyman Don Mulford, and signed into law by governor of California Ronald Reagan, the bill was crafted with the goal of disarming members of the Black Panther Party who were conducting armed patrols of Oakland neighborhoods, in what would later be termed copwatching.” —Wikipedia

Multi-burst trigger activator

noun “A device designed or redesigned to be attached to a semiautomatic firearm which allows the firearm to discharge two or more shots in a burst (Penal Code Section 16930)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

multigrain

Multigrain simply means more than one grain combined.

multiple

keyword: COBOL reserved word (z/OS)

multiply

keyword: COBOL reserved word (z/OS)

Multiuser DOS

operating system

Proprietary OS by Digital Research, Inc.

the successor of Concurrent DOS 386 — [Wikipedia: List of operating systems](#)

DOS

Muscogee

21 August 2023: “This was my case the Muscogee Nation’s principal chief is speaking about. Feels great to help Indigenous nations protect their sovereignty in a small way!” —[Brett Chapman](#)

Statement from Principal Chief David Hill: “Today, the Muscogee (Creek) Nation learned that in the case of Tulsa v. O’Brien, Tulsa Municipal Judge McCune dismissed a criminal charge brought by the City of Tulsa against an Osage Nation citizen for a crime alleged to have been committed within the Nation’s Reservation boundaries. Even though this case should have been filed under the Nation’s laws, the City of Tulsa takes the position that it retains criminal authority to prosecute Indians for on-reservation crimes. In upholding clear federal law, Judge McCune

rejected the City's position.

MCN Attorney General Geri Wisner said, "We are pleased to see the rule of law being upheld. The City of Tulsa wishes to ignore a law they don't like and instead rely upon the non-binding statements of two Supreme Court Justices in another case. Allowing city policies built on such illegal, self-serving interpretations would be a Pandora's Box that undermines the justice system as a whole. This is not consistent with maintaining law and order in the Reservation. We applaud Judge McCune for seeing the dangers and rejecting this ploy by the City of Tulsa."

21 August 2023: "Here's a petition I wrote in the case not mincing words about the illegality of it all and how the actions of Tulsa and the State of Oklahoma were downright unethical and geared toward stealing resources (court fines) from Native American nations." —[Brett Chapman: petition](#)

music

"don't write the music. let the music write itself." —Michael Jackson

Every time period has good and bad music and everything in between.

Over time the bad music gets filtered away, leaving the best.

While immersed in the time, the unfiltered bad makes the current seem jarringly worse than even the recent past.

20 March 2023: "Did some tech work in a big studio recently, had some ginormous soffit-mounted ATCs. They said they only ever used them to impress clients & mixed solely on their 3-way mid-field Focals (w/no decouplers). Bigger ain't always better & sound is a lot more important than volume." —[C MONEY BURNS](#)

14 January 2024: "Don't take it all for granted. The internet is huge. If you find an artist you love, you better buy that music and download it. People quit, people remove their music, people sign for record labels that bury their music, people die. Artists ain't gonna allow Spotify to steal from them forever. AI is here to stay. New artists are gonna have it reaaaally difficult to separate their art from generative stuff. And I'm not talking about silly memes or nice color schemes for our artworks. I'm talking about a brand new world meets Blade Runner and that's fucking terrifying Imo. Support artists you love TODAY." —[John Serrano](#)

music notation

21 November 2023: "If you're interested to know how a college music program can accommodate students who don't come in reading Western music notation, here's how we did it at Cal Poly Pomona:

1) We have a “fundamentals” class that precedes the usual music theory sequence that includes basic skills for reading and writing music. This is a no-brainer. However, doing just this isn't enough.

Most music degree programs assume that students jump right into the usual music theory sequence, so an extra prereq class before that can delay graduation if the rest of the curriculum isn't adjusted somehow.

2) So, we also re-organized the rest of the music theory sequence to make it more modular. After another general music theory course, students can branch off into more classical theory, jazz/pop theory, and/or 20th/21st century theory, depending on their goals and interests.

3) Finally, this isn't just about the music theory sequence. We have majors, coursework, and ensembles beyond classical music (Mariachi, Songwriter Showcase, Electronic Music, etc.) that don't rely on notation in the same way.

Even after doing all this, we have to fight a lot of preconceived notions that we've dumbed down our music curriculum somehow, or we aren't as “rigorous” or “serious” somehow because of this.

This couldn't be further from the truth! We also have faculty who have won Grammys, who sing in the LA Master Chorale, etc.

But also, we're a finite department and we can't possibly cover every genre under the sun. Somewhere in storage we have half a gamelan. I have no idea how or why. I would love it if we did a search to find someone to restore it and lead a Javanese gamelan ensemble.

But that doesn't directly respond to the needs of our students in the same way and I doubt admin would go for that lol

I post this thread because I find a lot of the discussion about this to be detached from the realities of music education. It can be done. But there's not a quick fix. I'm proud of the work we did but it's not perfect and it's ongoing.

Personally though if I could get students to properly notate a heavily syncopated rhythm in 4/4 by sophomore year I would count that as a major victory lol” —[isaac io schankler](#)

music theory

26 December 2023: “Conversations with the 7yo DM:

7yo DM: I made some improvements to music theory.

Me: What?

7yo DM: Every Good Barbarian Drops FoesÉ Good Bards Don't Fight AloneÉ All Clerics Employ Guidance

#dnd” —[redwyrn](#)

Elon Musk

16 March 2023: “A good example of boring propaganda is five years when you said your tunnel boring company was going to use leftover dirt to make bricks for affordable housing, everyone praised you for your innovation and generosity, and then you never even mentioned it again.” —[Cody Johnson](#)

19 March 2023: “press@twitter.com now auto responds with [shit emoji]” —[Elon Musk](#)

At 1:17 pm on 27 May 2023, Elon Musk tweeted the claim that Voltaire said “To learn who rules over you, simply find out who you are not allowed to criticize.” —[Elon Musk](#) The quotation actually comes from White nationalist and Holocaust denier Kevin Alfred Strum in 1993. Strum wrote in a 2017 essay for [the National Vanguard](#) that Voltaire didn't write the phrase, he (Strum) did. In the article Strum states “The Jews spread an irreconcilable hatred against all nations.”

20 August 2023: “When it comes to content creation on the platform, more than 62.5 million Musk followers have zero tweets.” —[Whirled Peas](#); article: [Mashable: Elon Musk's X follower count bloated by millions of new, inactive accounts](#)

Of the 153,209,283 X accounts following Musk at the time the data was collected, around 42 percent of Musk's followers, or more than 65.3 million users, have zero followers on their own account. Just over 72 percent, or nearly 112 million, of these users following Musk have less than 10 followers on their account.

When it comes to content creation on the platform, more than 62.5 million Musk followers have zero tweets. This would include users who have deleted all of their tweets by the time this data was collected over the past few weeks as well as accounts that have never before tweeted. More than 100 million Musk followers have less than 10 tweets posted to their account.

Another very interesting detail from Musk's follower data is exactly when his followers created their accounts. Musk completed his acquisition of Twitter on October 27, 2022. Out of all of Musk's current followers, more than 25 percent, or 38.9 million, were created on or after that date.

7 September 2023: “There seems to be an innate need for religion. Many atheists simply adopt another belief system (eg wokeness) that is essentially a religion.” —[Elon Musk](#) in his own absurd words

Atheism is simply the lack of belief in a diety or deities. It does not imply any belief system, just as the lack of belief in fairies does not imply belief in leprechauns or any other possible belief, just lack of belief in the one stated claim.

27 November 2023: “The rebuttal is often made that, well, Israel has killed civilians also in Gaza, but there is an important difference here, which is that Israel tries to avoid killing civilians, doing everything it can to avoid killing civilians, and there's no sort of joy expressed.” —Elon Musk, reported by [Stew Peters](#) with audio

4 December 2023: “There is an awful morality to those who deliberately have no kids: they are effectively demanding that other people's kids take care of them in their old age. That's messed up.” —[Elon Musk](#) in his own absurd words

My note: Elon Musk is so poor a parent that his own daughter refuses to speak with him.

Elon Musk is wrong to claim that children are the servants of their parents. I was there when both my mother and my father were dying because I cared about them, not because I was their servant.

Muslim ban

27 November 2023: “Obama and Biden had a “Muslim Ban” - they just didn’t call it that.”

—[Professor Anthony Zenkus](#)

N n

N

ASCII: 4E hex

UNICODE: LATIN CAPITAL LETTER N

n

ASCII: 6E hex

UNICODE: LATIN SMALL LETTER N

Ralph Nader

27 November 2023: “With an exchange of 50 Hamas-seized hostages for 150 Israeli-seized youngsters and women, held for years without charges, their freedom is starkly different. The Israeli hostages will be sent to functioning hospitals via operating ambulances and helicopters...

Palestinian hostages will not have such amenities. Some 150 hospitals and health facilities destroyed or rendered inoperable by Israeli missiles. After the truce, Palestinian hostages enter a free fire zone where their very existence will face Israeli assault day after day.” —[Ralph Nader](#)

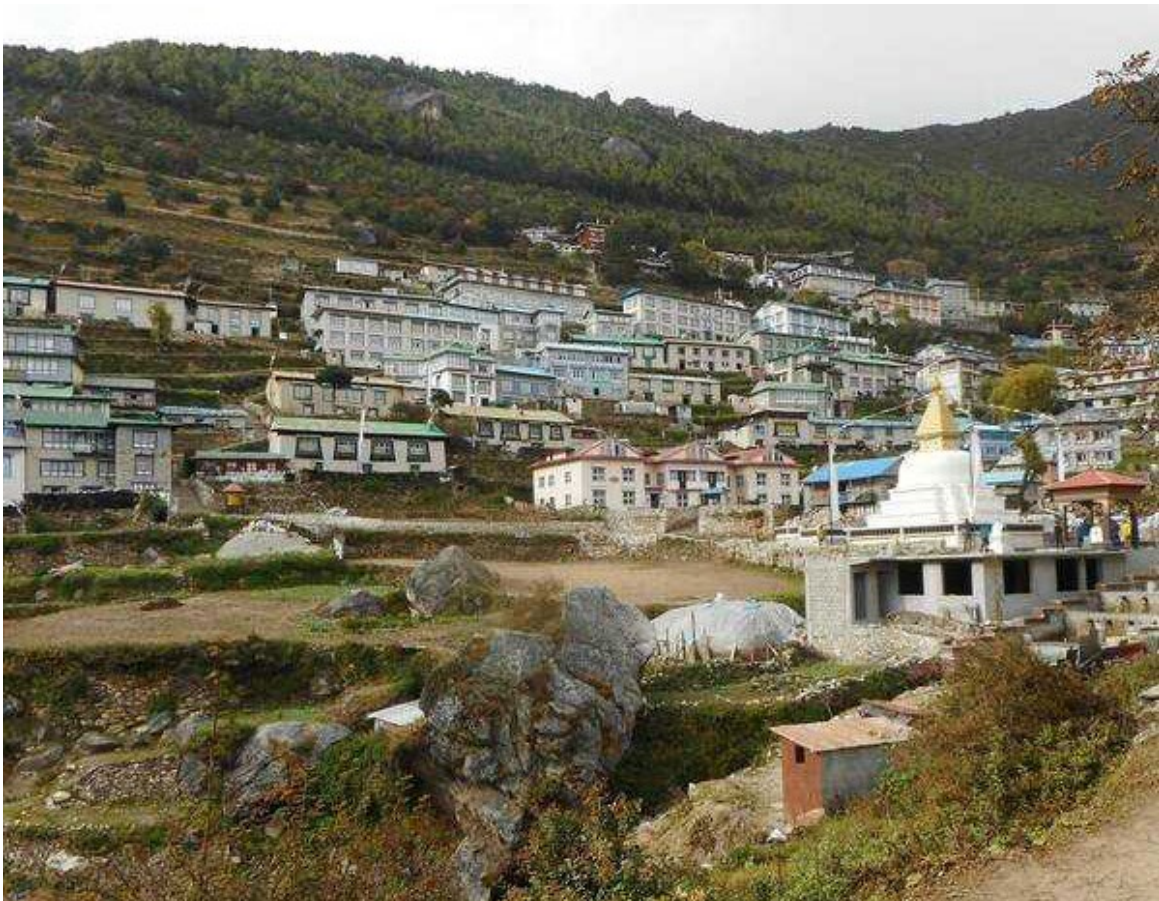
28 November 2023: “Antisemitism against dying Arabs in Palestine, mostly women and children, is spreading among U.S. companies and corporate law firms. They are throwing away job offers and resumes from young Americans who have spoken out against Israel’s genocidal war crimes and are supporting Palestinians rights to a state of their own. The lasting shame on these corporatists will not be forgotten.” —[Ralph Nader](#)

NAFTA

Joe Biden voted in favor of NAFTA.

Namche Bazar

15 December 2023: “Namche Bazaar in the Solukhumbu district in the Eastern Development Region of Nepal, often called a gateway to Everest, is one of the most-renowned and popular sherpa towns in the vicinity of Everest. Namche is built in a semi-circle along multi-leveled terraces on the mountainside. The town is home to Sagarmatha National Park Museum, the Sherpa Museum, luxury hotels, stores, restaurants, and trekking gear shops. Hikers generally spend at least two nights in Namche Bazaar before ascending the mountains.” —CIA World Factbook (material that expires after 30 days)



name

keyword: JavaScript object property

namespace

keyword: PHP reserved word

See: `_NAMESPACE_` — PHP

NaN

abbreviation

keyword: JavaScript property

NANADD

Name: NANADD

Meaning: Invalid addition, such as $(+\text{INF}) - (+\text{INF})$.

NOTE: The value varies by implementation.

Decimal: 2 (Standard Apple Numeric Environment)

Hex: \$02 (Standard Apple Numeric Environment)

NANASCBIN

Name: NANASCBIN

Meaning: Attempt to convert invalid ASCII string.

NOTE: The value varies by implementation.

Decimal: 17 (Standard Apple Numeric Environment)

Hex: \$11 (Standard Apple Numeric Environment)

nand

keyword: VHDL reserved key word

NANCOMP

Name: NANCOMP

Meaning: Result of converting comp NaN to floating.

NOTE: The value varies by implementation.

Decimal: 20 (Standard Apple Numeric Environment)

Hex: \$14 (Standard Apple Numeric Environment)

NANDIV

Name: NANDIV

Meaning: Invalid division, such as 0/0.

NOTE: The value varies by implementation.

Decimal: 4 (Standard Apple Numeric Environment)

Hex: \$04 (Standard Apple Numeric Environment)

NANFINAN

Name: NANFINAN

Meaning: Invalid argument to financial fuction.

NOTE: The value varies by implementation.

Decimal: 38 (Standard Apple Numeric Environment)

Hex: \$26 (Standard Apple Numeric Environment)

NANINVTRIG

Name: NANINVTRIG

Meaning: Invalid argument to inverse trigonometric routine.

NOTE: The value varies by implementation.

Decimal: 34 (Standard Apple Numeric Environment)

Hex: \$22 (Standard Apple Numeric Environment)

NANLOG

Name: NANLOG

Meaning: Invalid argument to log routine.

NOTE: The value varies by implementation.

Decimal: 36 (Standard Apple Numeric Environment)

Hex: \$24 (Standard Apple Numeric Environment)

NANMUL

Name: NANMUL

Meaning: Invalid multiplication, such as 0 * INF.

NOTE: The value varies by implementation.

Decimal: 8 (Standard Apple Numeric Environment)

Hex: \$08 (Standard Apple Numeric Environment)

NANPOWER

Name: NANPOWER

Meaning: Invalid argument to x^i or x^y .

NOTE: The value varies by implementation.

Decimal: 37 (Standard Apple Numeric Environment)

Hex: \$25 (Standard Apple Numeric Environment)

NANREM

Name: NANREM

Meaning: Invalid remainder or mod such as $x \text{ rem } 0$.

NOTE: The value varies by implementation.

Decimal: 9 (Standard Apple Numeric Environment)

Hex: \$09 (Standard Apple Numeric Environment)

NANSQRT

Name: NANSQRT

Meaning: Invalid square root, such as $\text{sqrt}(-1)$.

NOTE: The value varies by implementation.

Decimal: 1 (Standard Apple Numeric Environment)

Hex: \$01 (Standard Apple Numeric Environment)

NANTRIG

Name: NANTRIG

Meaning: Invalid argument to trigonometric routine.

NOTE: The value varies by implementation.

Decimal: 33 (Standard Apple Numeric Environment)

Hex: \$21 (Standard Apple Numeric Environment)

NANZERO

Name: NANZERO

Meaning: Attempt to create a NaN with a zero code.

NOTE: The value varies by implementation.

Decimal: 21 (Standard Apple Numeric Environment)

Hex: \$15 (Standard Apple Numeric Environment)

napalm



Famous picture from the Viet Nam War, after the US used napalm on a civilian village:

Napoleon Bonaparte

“Napoléon Bonaparte was born in France in 1769 (d.1822). This is believed to be his guitar. Built c.1816 by Parisian luthier Pierre Flambeau.” — [SentimentalStrings](#)



native

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

Native American

“Our nation was born in genocide—we are perhaps the only nation which tried as a matter of national policy to wipe out its Indigenous population. Indeed, even today we have not permitted ourselves to reject or feel remorse for this shameful episode.” —Martin Luther King Jr

18 March 2023: “From its inception, the settler state has been the initiator & primary apparatus of violence against Native Americans & African Americans. And it has regularly deputized & incentivized settlers to perpetuate its violence in an effort to maintain institutional & systemic power!” —[Melanin Mvskoke](#)

5 August 2023: “**Native cultures are not interchangeable.**

Every single Native culture is distinct and unique, though many share similarities, and lumping them together is ridiculous. And while some practices are pan-Indian, the vast majority are not.

Kokopelli isn't “Native American.” He's Hopi.

Dreamcatchers aren't “Native American,” they're Ojibwe.

War bonnets aren't “Native American,” they're Plains Indian.

Wendigoag aren't “Native American,” they're Algonquin.

Totem poles aren't “Native American,” they're Northwest Coastal Indian.

Skinwalkers aren't “Native American,” they're Navajo

Stop homogenizing our cultures. Every Native culture is beautiful and unique and deserves to be treated that way.” —[Native Americans](#)

3 December 2023: “In 2023, Native American children are still forced to cut their hair.

A school in Kansas forced an 8 year old Native child to cut his hair because it didn't fit requirements for boys.

Despite being protected by the First Amendment of Freedom of Expression & Religion.” —[Wagon Burner](#)

14 January 2024: “It pisses me off that the U.S. Military names planes and helicopters after Native Tribes.

WTF!?” —[Dr. Bipolar Marxist](#)

14 January 2024: “ “Apache” helicopters killing Palestinians. “Tomahawk” missiles fired on Yemen. “Black Hawk” and “Chinook” helicopters. The ongoing use of the term “Indian country” wherever they're engaged in a war. Giving Bin Laden the codename “Geronimo.” The disrespect.” —[agent ndn](#)

native-binary

keyword: COBOL reserved word (z/OS)

NATO

19 July 2023: “BREAKING: The Senate just passed my bipartisan bill with @marcorubio to prevent any U.S. President from leaving NATO.Ê

America is strong on our own, and even stronger with our allies.

Congress stands with this historic alliance.” —[Tim Kaine](#), US Senator (D-VA)

natural

keyword: SQL reserved word (z/OS)

natural science

“Natural science is one of the branches of science concerned with the description, understanding and prediction of natural phenomena, based on empirical evidence from observation and experimentation. Mechanisms such as peer review and repeatability of findings are used to try to ensure the validity of scientific advances.

Natural science can be divided into two main branches: life science and physical science. Life science is alternatively known as biology, and physical science is subdivided into branches: physics, chemistry, earth science, and astronomy. These branches of natural science may be further divided into more specialized branches (also known as fields).” —[Wikipedia](#)

nausea

[Ginger](#) has been used for thousands of years to relieve inflammation, nausea, and digestive problems, as well as improve immunity to disease and improve blood circulation.

therapeutic uses of cannabis

reprinted with Permission from Jack Herer's famous *The Emperor Wears No Clothes*

4. nausea relief
(e.g., AIDS,
cancer therapy, sea sickness)

Though it is known to be extremely damaging to the immune system, chemotherapy treatment is claimed by practitioners to benefit cancer and AIDS patients. But *chemo* has some other serious side effects too, including nausea. "Marijuana is the best agent for control of nausea in cancer chemotherapy," according to Dr. Thomas Ungerleider, who headed California's Marijuana for Cancer research program from 1979 to 1984. This is also true in AIDS and even in the unsettled stomach common in motion sickness.

Pharmaceutical nausea control drugs come in pills that are often swallowed by the patient only to be thrown back up. Because cannabis can be ingested as smoke, it stays in the system and keeps working even if vomiting continues.

Throughout California's 10-year Compassionate Marijuana Medical law, George Deukmejian, both as attorney general and as governor, with no regard for the suffering of dying cancer patients, made it virtually impossible for them to get cannabis. California Governor Pete Wilson was following the same course until the medical marijuana initiative passed in November 1996.

reprinted with Permission from Chapter 7 of [Jack Herer](#)'s famous *The Emperor Wears No Clothes*

Navajo

19 March 2023: "Very, very proud to be a Native American Indian. A proud of the Great Navajo Nation." —[Osamuskwasia Roan](#)



20 March 2023: “The Supreme Court on Monday considers whether to allow the Navajo Nation to pursue a claim that the federal government has a duty to address the Native American tribe's water rights.” —[NBC News](#)

11:08 am 20 March 2023: “This is actually a joke. What kind of nation steals the land of another nation by lying and promising to provide basic things like health care and infrastructure (electricity and running water), then doesn’t, then hides behind their own laws to say they can’t be sued?” —[Brett Chapman](#)

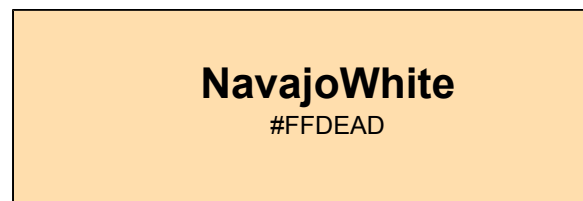
Friday, 2 June 2023: “Today, Speaker of the 25th Navajo Nation Crystalyne Curley & I, issued a statement denouncing Secretary of the Interior Deb Haaland’s decision to impose a 10-mile freeze around Chaco Culture National Historic Park. Her decision undermines our

sovereignty and self-determination.” —[Navajo Nation President Buu Nygren](#)



NavajoWhite

keyword: HTML color name



navigate

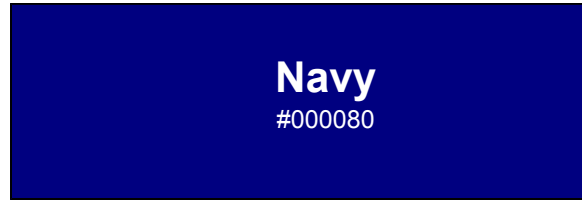
keyword: JavaScript windows method

Navigator

keyword: Navigator (initial cap) JavaScript windows object

Navy

keyword: HTML color name



nchar

keyword: SQL reserved word (z/OS)

Nebre

16 December 2023: “The gorgeous limestone standard-bearing statue of Nebre, fortress commander at Zawaiyet Umm el Rakham excavated by colleagues @LivUni and now on display in Luxor Museum” — [Dr Campbell Price](#)



See: .nef 📄 — file extension

negative

COBOL reserved word (z/OS)

keyword:

neoliberalism

“The truth is that after several decades of neoliberalism, the rich are becoming increasingly richer while the poor are both more numerous and increasingly poorer.” —Fidel Castro

Neptune

Neptune is the smallest of the gas giants, but has more mass than Uranus by about 18%.

nested_loop

keyword: SQL reserved word (z/OS)

Neuralink

On Thursday, 25 May 2023, the US FDA approved the launch of the first-in-human clinical study of Neuralink.

Elon Musk, through his PR people, bragged “This is the result of incredible work by the Neuralink team in close collaboration with the FDA.”

Prior to this announcement, Musk's Neuralink has reportedly killed more than 1,500 animals in four years.

See: [neutral foods](#)

Nevada

12 October 2023: “#GoGreen in 2024 #Nevada

Sign our ballot access petition.

Contact nvgreenparty@gmail.com for details” — [Green Party Ballot Access](#)



GO GREEN NEVADA

PLEASE SIGN OUR BALLOT PETITION

The Green Party of Nevada is beginning the process of gathering signatures to regain ballot access. But we need your help to get the required signatures.



Contact nvgreenparty@gmail.com to sign

13 October 2023: “ ‘We were not consulted’: Native Americans fight Nevada lithium mine on site of 1865 massacre. #ProtectThackerPass” — [UAINE \(ndnviewpoint\)](#)

new

keyword: Ada reserved key word

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

keyword: VHDL reserved key word

new jobs

Joe Biden claimed “I was able to create 12 million new jobs in two years, more than any president in American history has created in four years.”

The numbers are the result of the return to work after the first two years of the COVID-19 pandemic.

In terms of the change in jobs by percentage increase from the time a president took office, Biden is in the middle of recent presidents (post-WWII), well behind Johnson, Clinton, Nixon, Reagan, Carter, and slightly behind Obama.

Joe Biden lies as much as Donald Trump does. Vote Green.

New Orleans

27 August 2023: “And there it is! The all-time warmest day in New Orleans history. The official proclamation will come from @NWSNewOrleans after quality control, but this is now 2 degrees warmer than the previous all time record high of 102.” —[Eric Blake](#)

NCAR-RAP R

Output point: KMSY observed 2023 19:56 UTC
found

ture: 40.0°C (104°F) 23 19:53 UTC

point: 20.0°C (68°F) [RH

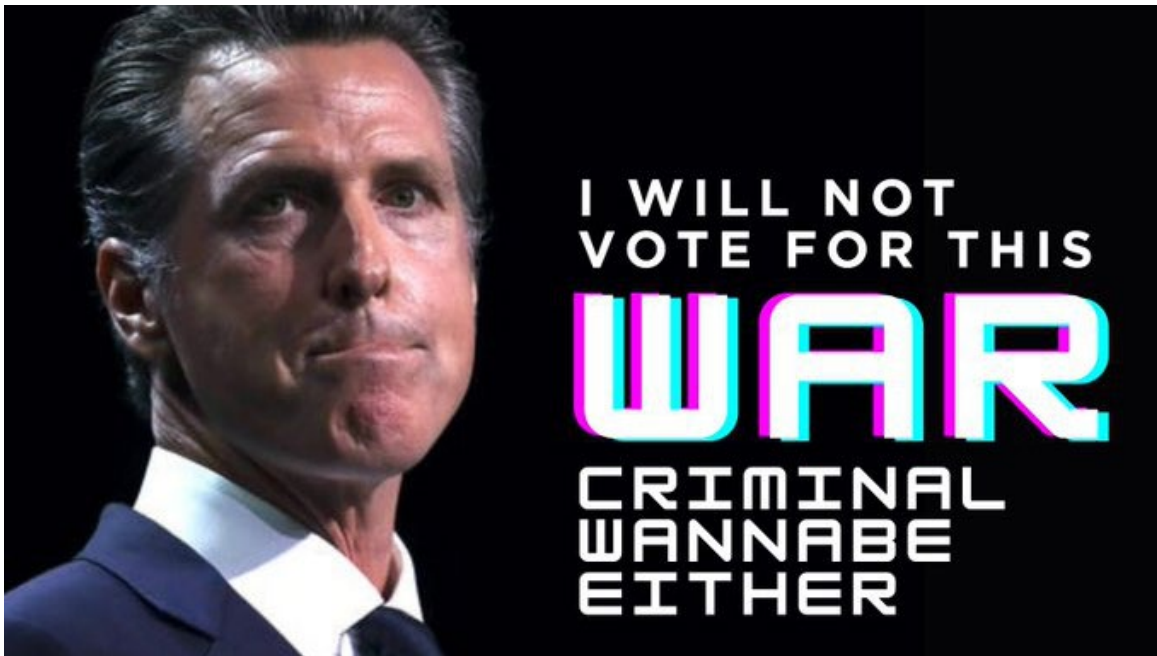
eter): 29.73 inches Hg (1013.25 hPa) [Sea-level pressure] 1013.25 hPa (4 knots; 2.1 m/s)

ls: from the NE (40 mph) 40 mph (4 knots; 2.1 m/s)
AGL
feet AGL

Present Weather: Partly cloudy weather observed at this time

KMSY 271953Z 04004KT 10SM FEW065 FEW280 40/20 A2973 RMK AO2 LTG DSNT N
SLP070 CB DSNT NW-NE T04000200

Gavin Newsom



30 September 2023: “THREAD. The recent behavior of Gavin Newsom on the issue of homelessness is among the most alarming things I’ve seen from a Democratic Party politician in recent years. If you haven’t been following, I collect four examples here.” —[Alec Karakatsanis](#)

30 September 2023: “First, he recently spoken openly about how he was so mad about federal judges protecting the constitutional rights of homeless people that he thought about doxing the personal contact information of judges so mobs of angry people could intimidate them:” —[Alec](#)

[Karakatsanis](#)

30 August 2023: “THREAD. Yesterday, the sitting Governor of California, a Democrat, was so angry that judges applying basic constitutional principles wouldn’t let armed government agents clear homeless people off the street that he began talking about inciting vigilante mobs against the judges:

Time and again, Newsom and other Democratic Party officials call themselves “progressive” and use that label to push some of the most cruel, ineffective, and authoritarian policies. So, how can we figure out when prominent people and their policies are actually progressive?” —[Alec Karakatsanis](#)

30 September 2023: “Second, he is trying to get the right wing of the Supreme Court to overturn a bedrock constitutional principle in order to permit the government to put homeless people in cages for simply existing on the street *even when there is no shelter space.*” —[Alec Karakatsanis](#)

28 September 2023: “The legal issue here is whether the government can put human beings in cages for living on the street *even if there is no available shelter.* Pretending this barbaric attempt to criminalize the poor is new or a “rare” agreement btw political parties is a lie.

The New York Times: In rare alliance, Democrats and Republicans seek legal power to clear homeless camps. Dozens of leaders, mostly from Western states, have asked the Supreme Court to overturn lower court decisions that restrict enforcement against public camping.” —[Alec Karakatsanis](#)

30 September 2023: “Existing law, which outrages Newsom, is government can jail people for being on the street, but only if there’s available shelter such that people are choosing to be on street instead of shelter. If people have nowhere to go, the courts said it’s unconstitutional to cage them.” —[Alec Karakatsanis](#)

30 September 2023: “Third, Newsom quietly did something remarkable. He created an entire new court bureaucracy in California, marketed with the acronym CARE, that seeks to dramatically expand the power and capacity of courts to coerce treatment of mentally ill people.” —[Alec Karakatsanis](#)

7 September 2023: “THREAD. California politicians are about to complete an epic charade. The Governor is about to sign into law a massive new bureaucracy called “CARE Court,” which stands for Community Assistance, Recovery and Empowerment Court. It’s a story not getting enough attention.

I’m writing about CARE Court for two reasons: 1) It illustrates how bureaucrats craft “reforms” that make the structural problems of our society worse; 2) CA politicians co-opted the language of “care” in service of an unprecedented expansion of state control and repression.

Remember: Status quo elites and people who own things win every time public is told structural problems of inequality (like housing) can be solved not by confronting the things leading to inequality, but by regulating that inequality with more layers of state power and control.

So, what is CARE Court? For background, read the basics about why it is so alarming in this Human Rights Watch analysis. In short, the plan creates an entirely new coercive court system in every county in California at significant cost to taxpayers.

Court gets power to coerce “treatment,” targeting people with mental illness and unhoused. All backed threat of conservatorship (people lose power to make decisions over their lives/bodies), and the power of government to use violence to enforce court orders.

The law itself does not ensure or provide ****any new housing or treatment capacity**** for a system that is already in a crisis of scarcity. The new bureaucracy operates entirely separately from any investment or initiatives in the actual care that would be provided to people.

You also have to understand that the push for CARE Court by Governor Newsom is coming against the backdrop of four larger phenomena:

1. A historic increase in inequality and shortage of affordable housing in California that causes widespread homelessness and housing insecurity;
2. A pervasive lack of sufficient treatment, either with respect to trained personnel or the physical infrastructure required to care for people’s medical problems;
3. A growing criminalization of poverty and mental illness, seen most recently in the wave of California cities criminalizing sitting, lying, or sleeping in public.
4. Elite political and upper class circles in California have been buzzing about the “disorder” on California’s streets. The sense of urgency to “do something” or to *appear to be doing something* about homelessness and mental illness has become a sort of obsession among people who see themselves as members of the political elite in California. This groupthink likely explains why Newsom’s plan passed the Senate 38-0 and the Assembly 62-2.

CARE Court won’t solve homelessness or mental illness, it makes things worse. The bill is widely opposed by civil rights, human rights, mental health, medical, homelessness, and disability advocacy organizations. Experts agree that coerced treatment is terrible policy:

1. Forcing people to obtain “treatment” against their will is not an effective medical intervention.
2. Even the most coercive bureaucracy in the world will not solve a basic problem of math: California has not committed to doing anywhere what it takes to provide the supportive housing and mental health infrastructure to make a dent in the problem.
3. By diverting enormous sums of money and personnel into creating an entirely new government bureaucracy full of judges, court personnel, liaisons to other existing bureaucracies, consultants, county government lawyers, public defenders, etc... the CARE Court diverts enormous sums of money away from the investments that are needed and creates an additional layer that actually makes it harder for people to get what they need. (Anyone unfamiliar with the woeful inefficiency of California’s various existing court bureaucracies should read *The Trial* by Franz Kafka and then imagine something even larger and more ineffective at solving social problems).

The Plan will hurt Californians in need of housing who do not suffer from mental illness by requiring counties to prioritize CARE Court participants for services and placement but not actually increasing the number of available places to live or the accessibility of services. So the bill will actually exacerbate the problems faced by other populations of people who are housing insecure or in need of treatment.

So, what's really going on? Well, an unprecedented movement has come together in California and across in U.S. to replace bureaucracies of control with investments in care. A big problem? Elites don't actually want to create more affordable housing or universal health care.

In my view, this language of investments in the things people need to flourish and a focus on helping community-based delivery of those things, is threatening both to existing bloated bureaucracies (like courts, police, prosecutors, prisons, probation, parole, etc.) but also to powerful interests who depend on certain features of housing and health care systems to make profits. Investments in care are popular among ordinary people and are backed by scientific consensus that those investments promote safety far more than police/prisons/courts.

I believe that this narrative/policy threat from people who are building alternative systems of "care" is a significant factor in the development/marketing of CARE Court by politicians, bureaucrats, and profiteers who profit from systems of isolation, punishment, and extraction.

There may not be a home for you to live in, but there's now a judge who can order you to live in it. And in liberal fashion, CA will provide, with tax \$\$\$, a lawyer to represent you in a court battle over whether to force you to get treatment from a provider who doesn't exist.

This represents another prominent example of a ruling political class that is incapable of actually addressing the structural problems of our society, particularly the lack of affordable housing, the lack of universal access to medical care, and growing inequality.

So, unwilling to do things that would be required to solve the problem, but threatened by a popular narrative from grassroots movements about the need to provide people the things they need to survive, the political elite turn to a marketing mirage: their own rhetoric of "care."

The goal? Make what they say hard to distinguish from what people actually interested in "care" want. It's mass obfuscation that traps us in an endless PR loop designed to trick people into thinking that those in power are well-meaning and working on the big problems of society.

All of this carries with it the same dangers that I wrote about with virtually every recent "criminal justice reform" in my book *Usual Cruelty*.

These reforms are designed to take away energy from radical changes by convincing well meaning but low-information voters who care about holistic well-being to support changes that do nothing to fix problems precisely because they preserve underlying root causes of the problems.

And this is how you should see their rhetoric. They claim the law is about "preserving self-determination" and "self-sufficiency," and "empowering." The very title is chosen so that everyone who hears about it on TV or in the paper immediately thinks about the concept of "care."

And it works. Here's how the *San Diego Union Tribune* and *SF Chronicle* naively described the impetus behind the law, essentially reprinting claims from the Governor that the legislation is about "helping" the state's most vulnerable people.

Only a profoundly lost government would unanimously pass a bill targeting homelessness that doesn't provide any homes.

Only a concerted propaganda effort can portray coerced government intervention opposed as ineffective and inhumane by the actual experts who devote their lives to working on these issues as *Òcompassion.Ó*

Only the most cynical political elite would portray a court bureaucracy using threats of

eventual violence to force involuntary treatment as ‘preserving self-determination.’ ” —[Alec Karakatsanis](#)

30 September 2023: “Incredibly, this massive new initiative targeting homeless people with mental illness **doesn’t provide any new housing or any new mental health services.** ” —[Alec Karakatsanis](#)

30 September 2023: “Fourth, after stoking fear of homeless people shoplifting, Newsom announced what he billed as the largest ever single investment in police to target them.” —[Alec Karakatsanis](#)

12 September 2023: “NEW: @GavinNewsom says CA is poised to make largest-ever single investment to combat organized retail theft: \$267M to 55 law enforcement agencies.

“When shameless criminals walk out of stores with stolen goods, they’ll walk straight into jail cells,” Newsom says in statement.” —[Emily Hoeven](#)

30 September 2023: “At a time of rising authoritarianism, the threat people like Newsome pose is extraordinary. Not only is the content of what he is saying monstrous, but the moment in which he is saying it is one of great peril for a society struggling to maintain basic democratic values.” —[Alec Karakatsanis](#)

Newton’s First Law

“Newton First Law: This law states that an object at rest stays at rest, and an object in motion stays in motion with the same speed and direction unless acted upon by an unbalanced force. It implies that the natural state of an object is to maintain its inertia, or resistance to change in motion.” —[Science Simplified](#)

Newton’s Second Law

“Newton Second Law: This law states that the force acting on an object is equal to the mass of that object times its acceleration ($F=ma$). It implies that the acceleration of an object is directly proportional to the net force applied to it and inversely proportional to its mass.” —[Science Simplified](#)

Newton’s Third Law

“Newton Third Law: This law states that for every action, there is an equal and opposite

reaction. It implies that whenever two objects interact, they exert equal and opposite forces on each other.” —[Science Simplified](#)

Newton OS

operating system

Proprietary OS by Apple for Apple MessagePad.

next

keyword: COBOL reserved word (z/OS)

keyword: Ruby reserved word

keyword: VHDL reserved key word

NFL players kneeling

5 December 2023: “The NFL is allowing players to take a knee for Israel? I have questions.” —[Kenny Akers](#)



5 December 2023: “I screamed in my car yesterday when I heard that the NFL said players could take a knee for Isreal. TAKE A KNEE! For a foreign fucking country!!! After they screamed how taking a knee is disrespectful to the national anthem.” —[meowmers](#)

the Nib

1 Septemeber 2023: “R.I.P. The Nib. You published my comic every week for 7 years. You pushed me to be a better writer and artist. You made me think of the message I was trying to say with my work. I got to be in the company of some of my idols, and discover new ones.” —[Joey Alison Sayers](#)

Nicaragua

nation

10 June 2022: Nicaraguan President Daniel Ortega authorized Russian troops, planes,, and ships to deploy to Nicaragua for purposes of training, law enforcement, or emergency response.

United States funds the Contras in Nicargua to overthrow the Saninista government 1981.

nice

The word "nice" entered English in the late 13th century from Old French “nische” (meaning careless, clumsy, weak, needy, foolish, ignorant) from Latin “necius” (meaning killer). When the word entered English it was an insult against someone who was extremely over-dressed. Over time it changed to the modern meaning from references to someone being nicely dressed.

Niger

1 August 2023: “BREAKING: France is evacuating citizens and other Europeans from Niger while the Russians are welcome. Also the President of Burkina Faso Captain Ibrahim Traore has banned Uranium exports to France and the United States. As the US influence diminishes, Russia’s influence is increasing in West Africa ” —[Simon Ateba](#)

1 August 2023: “Africa is preparing for war

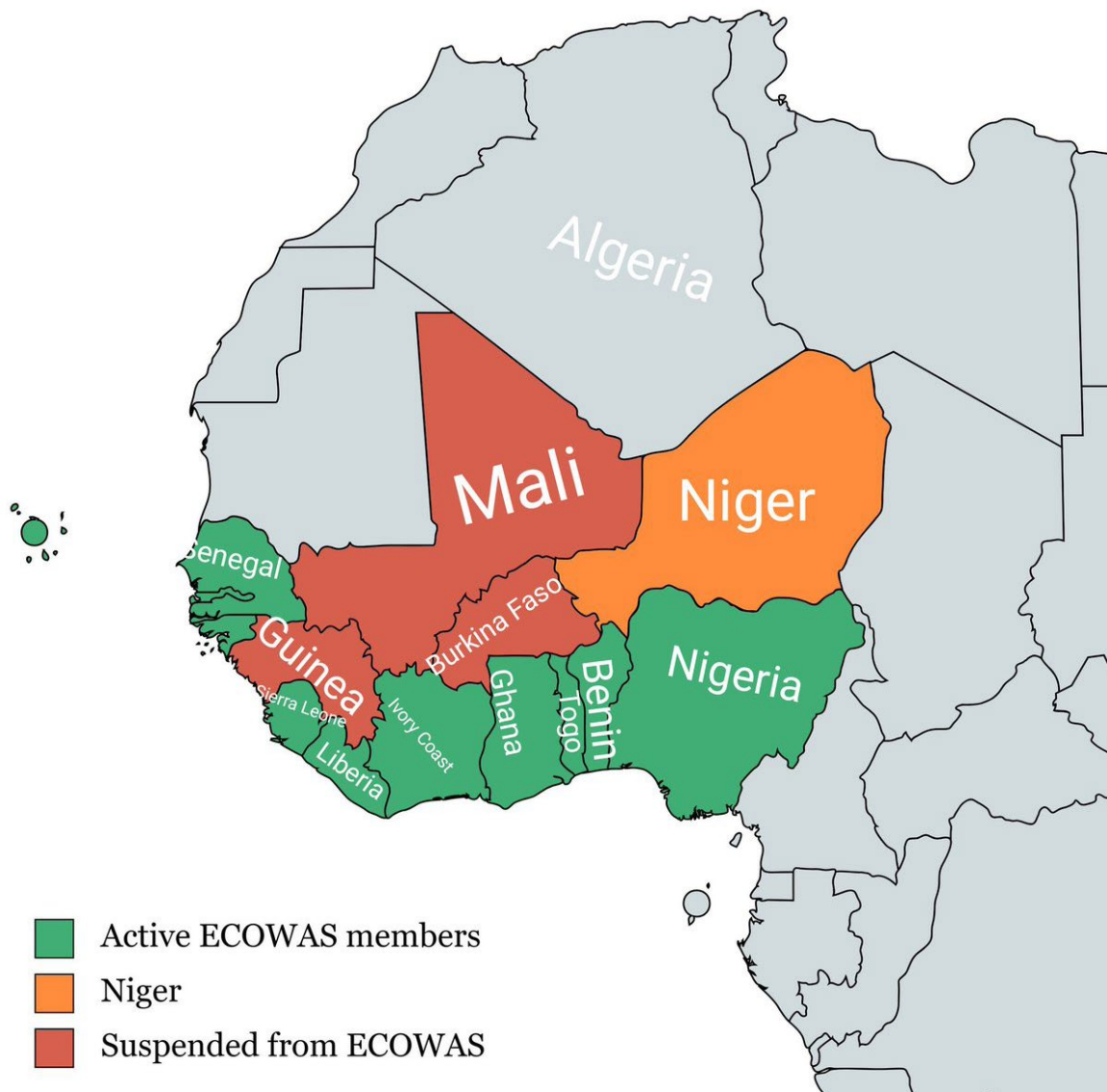
After the coup d’état in Niger and the removal of the French puppet from the presidential position, the West African organization ECOWAS, which is under the full control of the United States and France, announced that it would attack Niger.

Yesterday, Mali, Burkina Faso and Guinea jointly declared that the attack on Niger is an attack on all of them and that they will intervene militarily.

But the most interesting part is Algeria’s statement that it will also intervene militarily if Niger is attacked. Today the Chief of Staff of the Algerian Army arrived in Moscow for a meeting with Shoigu. Algeria is likely to receive heavy weapons from Russia and Iran through its ports.

The USA and France have confirmed that they support military intervention by ECOWAS, de facto confirming that they are creating a new war in the world like in Syria and Ukraine.

The same scheme worked for them when they destroyed Libya, but today Niger has powerful support” —[Megatron](#)



3 August 2023: “BREAKING:

The Senegalese Government has announced today that it will send Military Forces to Support any kind of Armed Intervention led by ECOWAS against Niger.

So far the ECOWAS (controlled by USA and France) Members of Nigeria, Senegal, and Ivory Coast have all stated they will assist with a Military Operation against Niger.

The world must send weapons to Niger to get rid of the aggressor!!!” —[Megatron](#)

3 August 2023: “What is going on with the Niger situation right now.

Niger has suspended all diplomatic ties with France, the United States, Togo and Nigeria and is withdrawing its ambassadors.

A US C-17A military transporter arrived in Benin today, and within hours the Benin government has given support for a military strike on Niger.

Nigeria has deployed its air force to the Niger border.

Negotiations between ECOWAS (USA and France backed) and the new government of Niger have failed.

The US is dropping military cargo around Niger with its warplanes and preparing its vassals

to attack Niger.” —[Megatron](#)

4 August 2023: “ France does not recognize the cancellation of military agreements with Niger and refuses to withdraw its troops.

The new government of Niger has decided to denounce all military agreements with Paris.

✖ In response, French authorities refuse to recognize this decision, stating that it was made by an unlawful government. The French Ministry of Foreign Affairs stated that the deposed government of President Mohamed Bazoum was the “sole government recognized by France and the international community.” Furthermore, France rejects the withdrawal of its military contingent from Niger, which is estimated to consist of 1,500 servicemen.” —[Zlatti71](#)

4 August 2023: “ Chad rejects Niger coup intervention

Chad will not intervene in a coup in neighbouring Niger, the country’s defence minister Daoud Yaya Brahim has said.

He made his remarks on state television on Friday, just as West Africa's regional bloc, ECOWAS, said it has devised a possible plan to reinstate ousted President Mohamed Bazoum.

In other words, Chad acknowledges the current government and will not invade to oust it. Earlier in a statement, the government of Chad iterated that they would respect the wishes of the people of Niger.” —[DD Geopolitics](#)

5 August 2023: “The USA has officially ENDED most foreign aid for Niger after a recent coup removed the corrupt puppet president.

In response, the new interim government has said USA should keep its aid, and use it to solve America’s homeless crisis ” —[Jackson Hinkle](#)

6 August 2023: “BREAKING:

Some moment ago the Niger’s junta announced that ECOWAS has completed its intervention plans and that two West African countries have begun the pre-deployment of their troops across the borders between Niger and ECOWAS (France and US backed countries).

Niger has closed its airspace.

Wagner is deployed around the capital Niamey.” —[Megatron](#)

7 August 2023: “Wagner Group soldiers were attacked by al-Qaeda terrorists on the border of Mali and Niger.

Al-Qaeda confirmed their fighters surrounded Wagner and will not let them enter Niger.” —[Jackson Hinkle](#)

7 August 2023: “The African decolonisation is getting interesting.

Russian military transport planes have started landing at the airport in Niger; on the other hand, US warplanes are landing at the airport in Nigeria.

Who is going to be fastest? Will Wagner throw out the French from their barracks in Niger, or will the US level all houses in the capital?” —[alternative news](#)

7 August 2023: “Media: Nuland met rebels in Niger, negotiations were frank and difficult
US Deputy Secretary of State Nuland met with rebel leaders of Niger, the talks were “frank

and at times quite difficult” - TV

Victoria Nuland: After I warned them, the Putschist Leaders in Niger are well aware of the dangers of allying with Russia

Part of Victoria Nuland statements:

I wanted to point out to the Putschist leaders the impact of not restoring democracy on the relationship between United States and Niger

I asked to meet the detained president, Mohamed Bazoum, but I was not given an opportunity to meet him by the Military Junta

I did not have the opportunity to meet with the coup leader, General Abd al-Rahman Tiani

My meeting with the coup leaders in Niger opened the way for further talks

I stressed to the Putschist Leaders of Niger the dangers of allying with Wagner Group” —[DD Geopolitics](#)

7 August 2023: “BREAKING: After Victoria Nuland’s visit to Niger, the US government has immediately SUSPENDED all US economic aid to the country ” —[Jackson Hinkle](#)

10 August 2023: “France needs Niger’s uranium

The US has a drone base in Niger

There’s a pipeline planned to go through Niger from Nigeria

Europe needs that pipeline now that the US blew up Nordstream

There’s plenty of interests in Niger, none have to do with democracy ” —[Black in the Empire](#)

10 August 2023: “STUNNING: Secret Pakistan cable reveals explicit US pressure to remove democratically elected leader Imran Khan—which immediately followed.

The document cites US frustration at Pakistan’s “aggressively neutral” stance on Ukraine.

It then states that US-Pakistan relations will suffer *unless* Khan is removed by a no confidence vote.

This follows months of the US government repeatedly denying that the meeting took place.” —[System Update](#)

10 Aug 2023: “This week, Victoria Nuland went to Niger to demand re-instatement of the US-supported president, saying US dislikes coups.

In 2014, Nuland got caught on tape picking Ukraine’s next president after the elected one was removed in a US-supported coup.

Yesterday, this happened.” —[Glenn Greenwald](#)

11 August 2023: “Spokesmen from Mali and Burkina Faso tell ECOWAS and NATO to fuck off. The west will not turn Niger into another Libya.

NATO’s involvement in Libya has caused a humanitarian and socio-economic crisis in not just Libya, but it’s neighbors too.

“I would like to remind you that for more than ten years Burkina Faso , Mali , and Niger have been confronting the negative consequences, socio-economic consequences, political consequences, security consequences, humanitarian consequences of the risky NATO adventure in Libya.”

Says spokesmen for governments of Mali and Burkina Faso” —[Apollo](#)

12 August 2023: “12 years ago the West attacked Libya the richest country in Africa, and murdered their President with little pushback even from Africa

Now they fear attacking a poor country like Niger, and have to try to get African countries they control to do it

Their power has diminished” —[Black in the Empire](#)

12 August 2023: “Burkina Faso has TERMINATED their Non-Double Taxation Treaty with France since 1967.” —[Africa Archives](#)

12 August 2023: “Mali has revoked Air France’s permit to fly to their African nation.” —[Africa Archives](#)

12 August 2023: “In Niger, thousands of people have gathered in front of the French military base located in the capital, Niamey.

They are demanding the exit of French troops and stating their opposition to the imminent ECOWAS intervention in their country.” —[Africa Archives](#) [link includes video]

13 August 2023: “BREAKING: ECOWAS member state, Cape Verde opposes military intervention in Niger.

According to the country’s president, Jose Maria Neves, “We all should work to restore constitutional order in Niger but in no way through a military intervention or an armed conflict at this point. We should actively engage in talks and resolve issues diplomatically because any military intervention will make the situation worse, turning the region into an explosive zone,” Agence France-Presse quoted him as saying.

Meanwhile, a meeting of defence chiefs of ECOWAS member nations scheduled to hold in Accra, Ghana, yesterday, Saturday, August 12, to concretize the planned troops deployment for military intervention in Niger Republic, was unexpectedly called off. Reason being that member nations are divided on the need for such an intervention at this time.

Cape Verde joins the ranks of Sierra Leone, Ghana, Liberia and Togo who earlier on declined to take position on the proposed military intervention in Niger. This explains why the proposed Accra, Ghana meeting of ECOWAS military chiefs eventually failed to hold.

Not sure if it’s a coincidence, but all these institutional resistance to military intervention became more evident and grew louder shortly after RUSSIA openly warned against military intervention in Niger. Beyond that, Africans have been up in arms against the rushed decision and the campaign against it has been robust and simply overwhelming, both online and on-site.

Interestingly, some 94 French lawmakers have blasted President Emmanuel Macron in an open letter following the Niger coup. They warned that France was at the risk of being squeezed out of Africa by global powers like Russia, China, etc. They urged Macron to rethink France’s Africa policy as it had failed to win over cooperation from the Africans.

Bottomline, the voice of the people of AFRICA is being heard loud and clear, more than at any other time in history. Enough is enough! The time for Africa’s freedom is now and it’s not negotiable. Never ever give up on mama. Viva AFRICA!” —[J.C. Okechukwu](#)

13 August 2023: “Macron has announced he will not tolerate ANY ATTACK against France’s interests in Niger and will respond forcefully.” —[Jackson Hinkle](#)

13 August 2023: “Putin warns that a military intervention in Niger would lead to a ‘long-term conflict.’ ” —[Jackson Hinkle](#)

Jacques Chirac, the former President and former Prime Minister of France said the following:

“We have to be honest and acknowledge that a big part of the money in our banks comes precisely from exploiting the African Continent.”

“Without Africa, France would slide down into the rank of a third world power.”

“We bled Africa for four and a half centuries. We looted their raw materials, then we told lies that the Africans are good for nothing. In thre name of religion we destroyed their culture. And after being made rich at their expense, we now steal their brains through miseducation and propaganda to prevent themn from enacting Black retribution against US”, Jacques Rene Chirac, former President of france

France is currently the 7th largest economy, with a GDP of ~\$2.9 Trillion dollars.

It is estimated that if you stripped African wealth away from France, the country would plunge to the 15th place, at a GDP of \$1.3 Trillion.

However, Africa is not the only remnant of Franchise colonialism. If you stripped away all overseas colonial territories from France, their GDP would plummet to \$1 Trillion... almost A THIRD of what it is today.

In per capita terms, France would plummet to a GDP per capita of \$12k... which is on par with Mexico.

France, without its colonial possessions, would truly be an impoverished country without Africa and its overseas territories.

France, however, maintains that the CFA Franc system is not as one-sided as it seems, and that participation in the CFA Franc system is “completely voluntary”. Nothing can be further from the truth.

France insists that they continue to provide aid for their colonies, but any “aid” that France provides comes DIRECTLY FROM AFRICAN FOREIGN EXCHANGE RESERVES stored in French Central banks. This means that any aid France provides to Africa comes directly from the wealth that the French themselves have stolen from Africa.

France says that participation in the CFA Franc system is “completely voluntary”. But no one in the right mind would willingly accept a clearly one sided deal. However, France has bribed many African leaders to accept these deals which are clearly disastrous for their countries. Many African leaders are handpicked by France and the west, effectively serving as puppets. Many African leaders of the newly independent countries were personally handpicked to Jacques Foccart, French oligarch, politician, and advisor to the French president on African affairs.

Gabon is a CFA Franc member whose former president, Omar Bongo, was effectively handpicked by the French Oligarchs. France filled Bongo’s pockets with endless bribes to ensure Gabon remains subservient to France. Bongo saw his personal wealth skyrocket to to \$130 Million, at a time when 70% of Gabon’s population lived in extreme poverty. In return, Bongo adopted the CFA Franc and further permitted French oil company (Elf), and French Mining

companies (Ariva and Total Energies) have unlimited access to Gabon's oil reserves and uranium mines.

Bongo further bribed French politicians to ensure his power remains undisturbed. The current president of Gabon is Omar Bongo's son, Ali Bongo.

Gabon has one of the highest rates of infant mortality on earth, while their puppet leaders are multi-millionaires.

A similar situation can be found with Mohamed Bazoum, the recently ousted president of Niger. Bazoum has been a loyal puppet of the west, often times known to severely downplay the atrocities of French colonialism.

Some (unconfirmed) estimates of Bazoum's net worth are as high as \$527 Million, at a time when 40% of Niger's population lives in extreme poverty. Niger's per capita income is roughly \$480 per year, and ranks 187th out of 188 in the Human Development Index (HDI).

Niger is known as "the Uranium capital of Africa" where 4 out of 5 French lightbulbs are powered by uranium from Niger. While at the same time, only 10-15% of Nigerians have access to electricity.

No rational person would ever accept France's one sided deal. Those that couldn't be bribed were made examples of.

Such was the case with socialist leader Ahmed Sekou Toure, leader of Guinea. After independence, Toure refused to adopt the CFA Franc system. Instead, he chose to adopt a unique currency for Guinea. He stated: "I would choose to be poor in freedom rather than be rich in slavery."

France immediately responded by cutting off all foreign aid to Guinea, dismantled the power grid, and flooded the country with billions of fake CFA Franc notes to massively ramp up inflation in the country. Additionally, France (a permanent member of the US security council) vetoed Guinea's membership into the UN. The result, according to a French politicians, was "a resounding success". Guinea was devastated economically, and till today, has never fully recovered.

Ahmed Sekou Tore is not the only one to resist French neocolonial dominance. Other revolutionary leaders include David Dacko, Thomas Sankara, Maurice Yameogo, Hubert Maga, Modibo Keita, Jean-Bedal Bokassa, and Sylvanus Olympio. They were either assassinated or ousted by France for refusing to adopt the CFA Franc.

Sylvanus Olympio was the socialist leader of Togo who refused to adopt the CFA Franc. 3 days before formally issuing a new, independent currency, Olympio was "mysteriously" assassinated. France refuses to look into his assassination (I wonder why).

Despite all this, France's claiming that participation into the CFA Franc is "Completely Voluntary" is beyond laughable.

France has gone to great lengths to ensure its colonial possessions remain subservient to France, even after independence. France still maintains multiple military bases in their former African colonies, and has **INVADED** the continent over 50 TIMES since their independence.

2. French Companies retain exclusive rights over virtually every natural resource in the former colonies.

The CFA Franc is not the only tool of modern day French oppression of Africa. After independence, France retained exclusive rights to all natural resources in their former colonies.

4 out of 5 lightbulbs in France are powered by uranium from Niger. And 75% of the French power grid is nuclear powered. This means that Niger single-handedly powers 60% of France's electricity... at a time when only 10-15% of Nigerians have access to electricity themselves.

French State-owned mining company, Ariva, retains exclusive mining rights across all of French North Africa's vast uranium reserves. They have fully bribed Niger's government to loot the country dry.

Here is the one sided contract that Ariva has with Niger [pictures follow the text]

France boasts the 4th largest gold reserves, with 2,436 tons, yet not a single gold mine within its borders.

Mali, a former colony of France, has 860 gold mines and produces 50 tons of gold per year, but doesn't have any gold reserves in its banks.

Apart from looting the continent dry, and destroying domestic growth in North Africa, France also dominates north Africa's foreign trade.

France buys African natural resources at sub market prices, pays minimal royalty fees, and then resells to Africa above the global market price. This is a classic colonial tactic used by the British in India, and other colonial powers elsewhere.

What little remains of the African Domestic industries, are unable to sell to the global market without the permission of France.

This is nothing more than imperial dominance.

French billionaire, Vincent Bollore, is a singular owner of most of west Africa's major ports. In France, Bollore has earned the nickname "Emperor of Africa".

3. France retains right to maintain troops and military bases in the former colonies.

The third pillar of the "Cooperation Agreement" between France and their former colonies is the continual French military presence on the African continent.

France has the third largest amount of overseas military bases, behind the US and UK, and has roughly 5000 troops stationed in France.

To date, France has INVADDED Africa over 50 times since independence.

France has retained the right to not only retain a military presence, but they also are the only ones who get to supply African countries with military weapons and training. African nations are banned from making their own foreign policy decisions without consulting France.

French post-colonial activity has shown no regard to the ethnic makeup of their colonies, and as a result, they empower one ethnic group which later goes in to suppress another group who they have had historical animosities with. French (and NATO) military presence in Africa has led to increased terrorism from Al Qaeda and other religious extremists.

There have been more deaths in Africa from French-trained national security forces than there have been at the hands of terrorists and other militant groups.

With France dominating virtually ALL aspects (monetary, economic, political, fiscal, military, etc...) of their former North African colonies, can you really say that they are truly independent? Can you really say that colonialism came to an end?

France continues to maintain their colonial empire till this very day.

Any aid that Africa receives from France is aid that France provides via the African foreign exchange reserves stored in Paris. Not only is that Africa's rightful wealth, but it needs to be paid back with interest. Furthermore, that money can only be spent on aid from companies based out

of France, or from companies approved by France. So there is no way Africans can legally seek aid from a country such as Russia.

Other global financial institutions, such as the IMF and the World Bank, are poison pills. Both the IMF and the World Bank are based out of the USA, where America retains veto power. Any aid that comes from them comes with strings attached, and countries will never be able to repay it without enacting massive austerity programs which will further damage the already-impooverished nations.

The Africa Development Bank, based in the Ivory Coast, is allegedly suppose to aid in the development of Africa, but it too is a western puppet. Ivory Coast is a loyal ECOWAS member, and the president of Ivory Coast is a former IMF economist fully embedded within the French elite.

Lastly, North Africa is not the only element of French neocolonialism. France still owns and occupies many islands across the globe. Together, the total size of France's overseas possessions amount to the size of Bulgaria.

But the real value in French overseas islands is not the land itself, but the oceans that surround it. Owning an island means you also own all rights to the ocean surround them. France owns all fishing, mining, drilling, etc... rights around all islands it occupies. This brings France's total Excuse Economic Zone (EEZ) to 8% of the total global area.

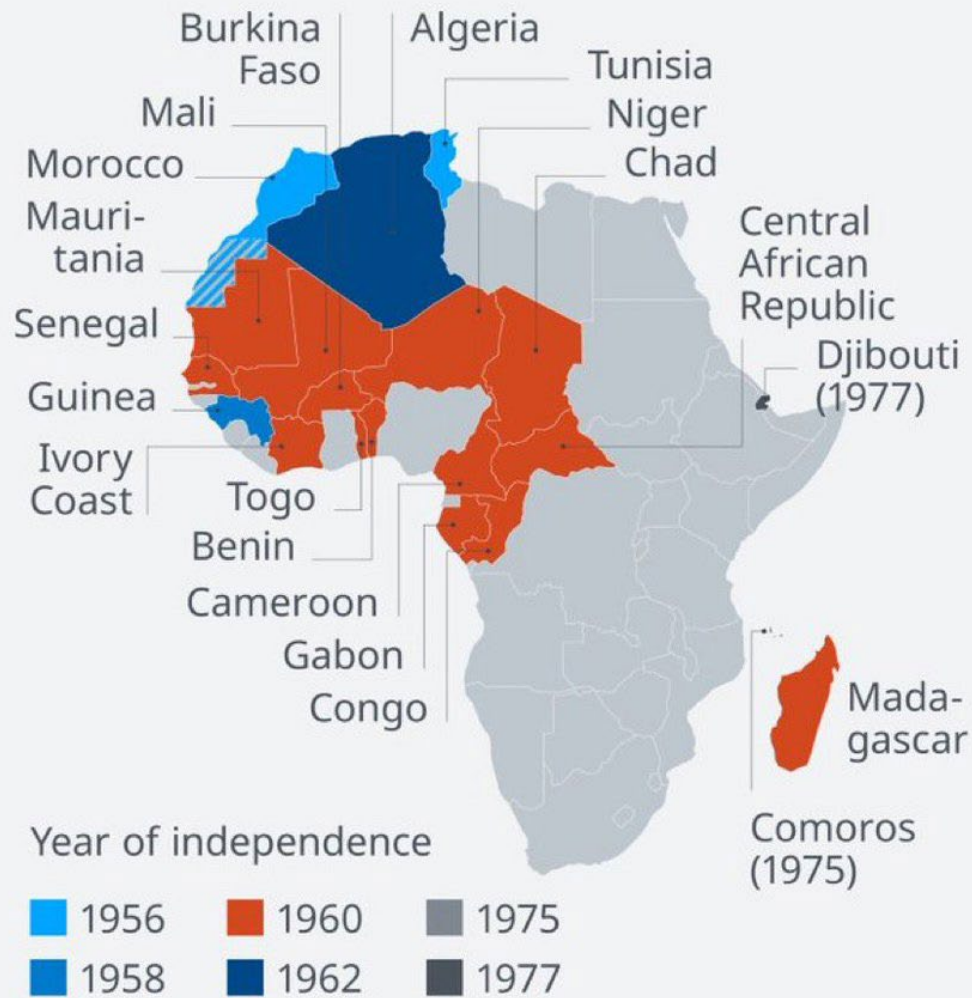
The country of France takes up 0.45% of the global land area. But factoring in France's oceanic EEZs means that the French people (0.84% of the global population) own 8% of the global surface. This is more than all of continental Europe. France owns more EEZs than any other country on earth, and is a reminder that French imperialism is still alive and well.

Pictured below: France and its overseas colonies (left), and the French EEZs (right).

France is currently the 7th largest economy on the planet, but without their exploitation of Africa, and without their EEZs, France would drop to 18th place in the world standing, with a per capita GDP on par with Mexico.” —[Apollo](#)

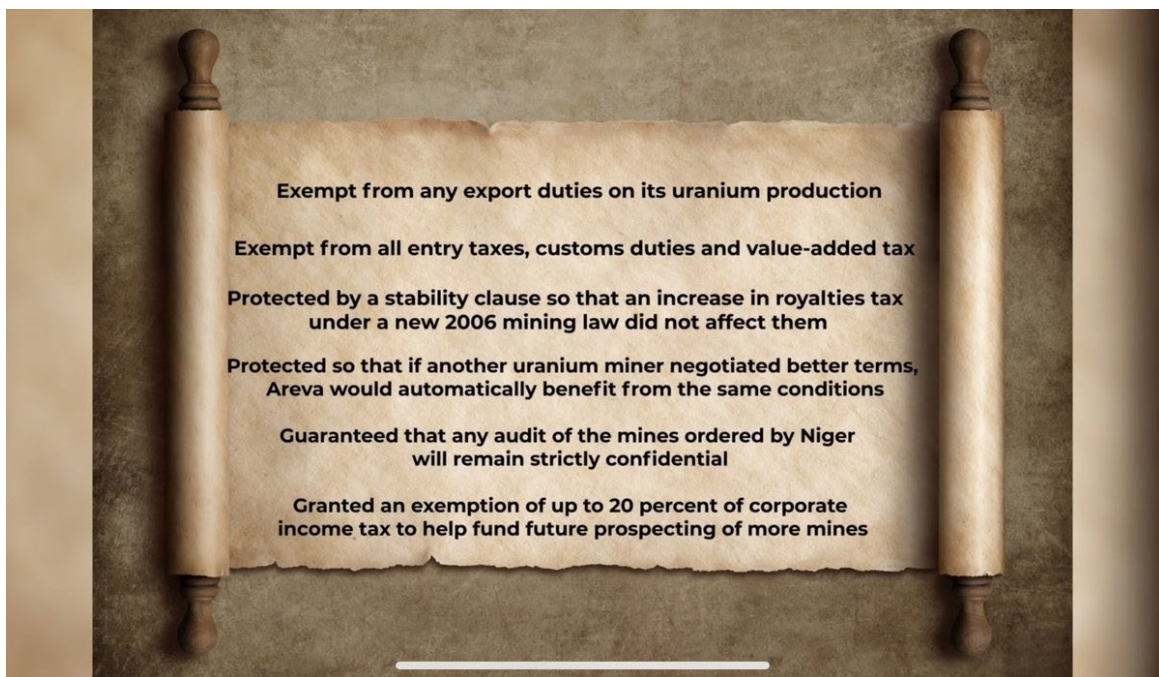
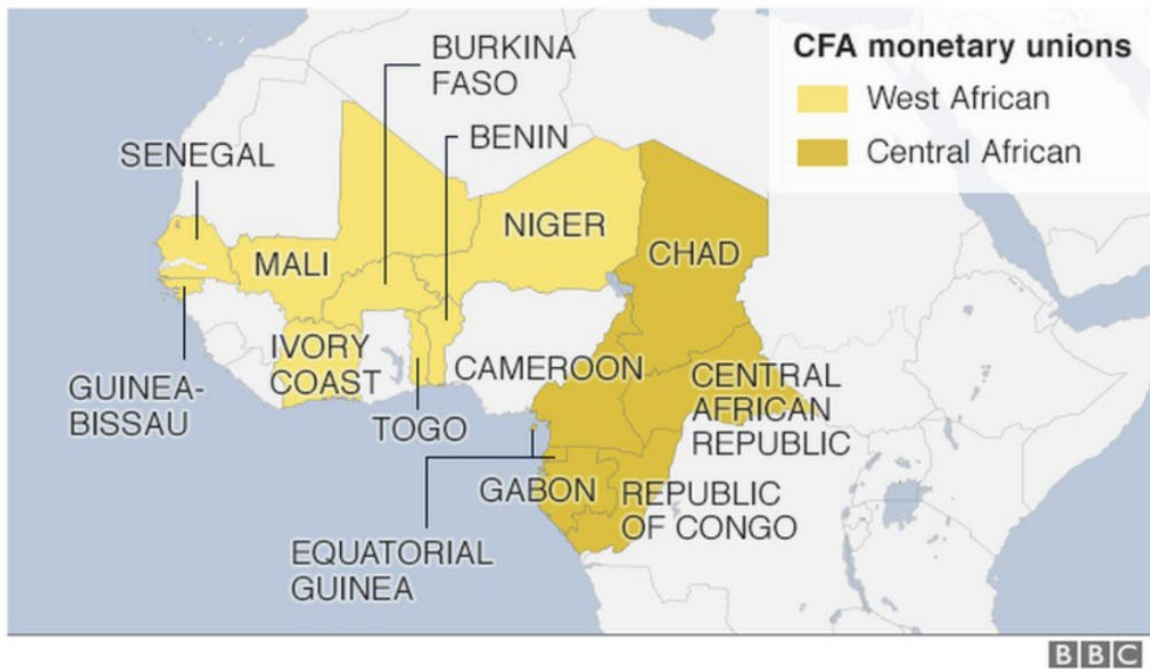
Former French colonies in Africa

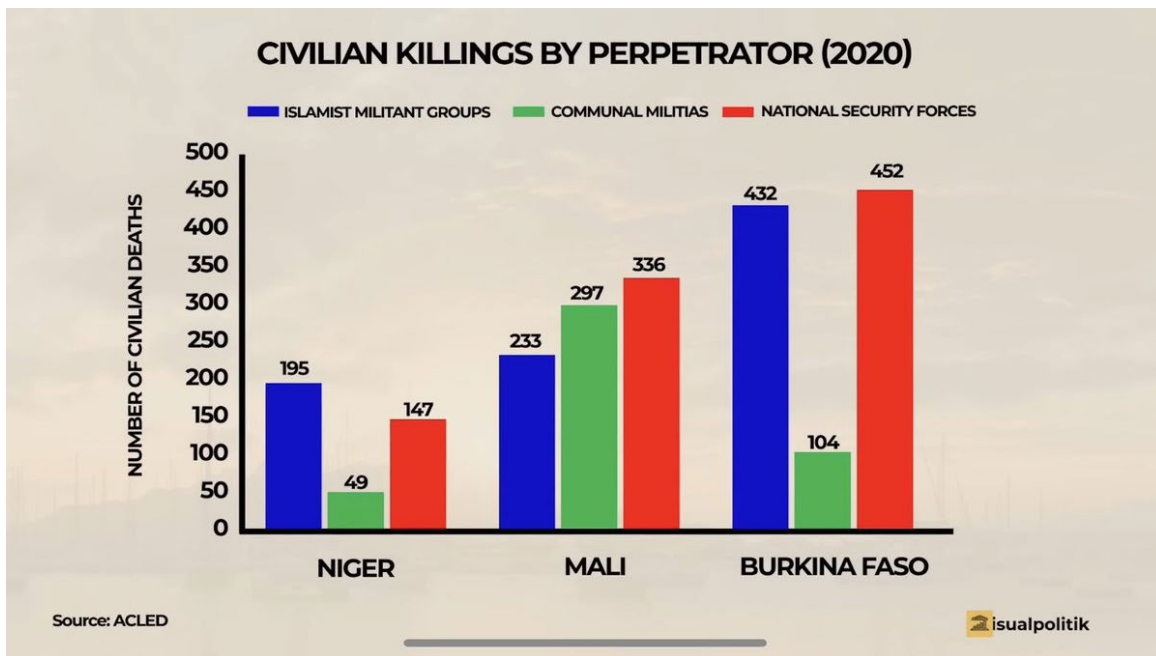
by year of independence



Source: DW, NED

Where the CFA franc is used in Africa





14 August 2023: “FRANCE - THE COLONIAL EMPIRE THAT NEVER DIED

In the wake of everything going on in Niger, Burkina Faso, Mali, etc... I decided to illustrate the atrocities of the French Colonial Empire which exists till this very day

FRANCE CONTINUES TO PLUNDER AFRICA TILL THIS VERY DAY

Every year, the French Empire extracts roughly \$1.5 TRILLION from its colonies. Without being able to exploit developing countries in Africa, their empire would collapse.

Since the end of WWII, direct imperial rule became not only difficult, but also frowned upon. Rather than give up their empire completely, they decided to simply hide it in an atrocious, but covert, fashion.

“Without Africa, France will slide down into the rank of a third world power,” former French President Jacques Chirac

Similar to how India was considered the “Crown Jewel” of the British Empire, French North

Africa had bankrolled, and CONTINUES TO BANKROLL, the modern French Empire.

In order to gain independence, most French North African colonies were forced to sign a so-called “Cooperation Agreement” with France. This was nothing more than the continuation of French imperialism in a different format.

The “Cooperation Agreement” prioritized French interests above all, without any consideration whatsoever towards the welfare of their colonies. There were three main pillars:

1. France retains Monitory Sovereignty and Control over French North Africa via the use of the CFA Franc currency.
2. French Companies retain exclusive rights over virtually every natural resource in the former colonies.
3. France retains right to maintain troops and military bases in the former colonies.

1. CFA Franc explained:

To control a country's money is to control its destiny. Without monitory sovereignty, there is no way to have economic sovereignty. Without economic sovereignty, there is no way to have political sovereignty. And that is precisely what France set out to do via the CFA Franc.

CFA Franc was first introduced by Charles De Gaulle, and is currently used by 14 nations in North Africa (Roughly 200 Million people). Originally, ‘CFA’ stood for “Colonial French Africa”, but as the image of colonialism became increasingly frowned upon, the acronym was later changed to “Financial Community of Africa”. Nonetheless, changing the acronym did nothing to change the underlying mechanics of how the the CFA Franc functioned.

The CFA Franc is tied to France's currency, at a fixed rate. This means that when the CFA Franc fluctuates in value at the exact same rate that the Euro does. French central bank retains the right to print, circulate and regulate all CFA Franc bills. CFA Franc nations don't even get to control their own interest rates. They are completely set by France. So in periods of economic turmoil, African nations are virtually powerless to set any monitory reforms needed for recovery.

At face value, this might initially seem to have its benefits, because being tied to a stable currency, such as the Euro, offers a degree of financial security and inflation protection. However, in practice, it makes export dependent growth extremely difficult. In order for a country to break out of poverty, it needs export-driven growth and its own monetary independence.

The CFA Franc is fixed to the Euro, which results in domestic goods becoming less price competitive whenever the Euro appreciates against other currencies, especially the US dollar, the global reserve currency. This has resulted in domestic industries never having taken off within these African countries. As a consequence, virtually every CFA Franc nation has seen a Real GDP DECREASE from their 1970s levels. Decreasing Real GDP, followed by a stagnated export economy, has resulted in economic ruin for the people of the CFA Franc Nations. The Ivory Coast's real GDP has decreased over 30% since 1978. Cameroon and the Republic of Congo have seen similar dips.

A more nefarious element of the CFA Franc is that Franc requires 50% of participating countries' foreign reserves to be stored with the French central bank. In addition, France require 20% additional deposits for liabilities.

This does two things. It extracts much needed wealth out of Africa, and into France. It makes the French economy look stronger on paper, and increases their government bond rating, at the

expense of Africa.

Depriving Africa of their own wealth has caused underdevelopment in these countries. The problem of underdevelopment was further compounded by the fact that Africa no longer became a reliable place to store investments. This caused CFA member countries to see Billions in wealth leave their already-impoverished country and go to Europe, America and abroad. Since 1979, the Ivory Coast saw \$40B leave the country in capital flight. The same story applies to other member nations. Capital Flight accounts for a very tiny percentage of money leaving the country, however, that relatively minor amount alone could have reduced African poverty by 55% had it remained within their respective countries.

To add insult to injury, France makes it incredibly difficult for CFA member states to access THEIR OWN MONEY stored in French banks. The CDA Franc charter states that 50% of foreign reserves must be stored in French central banks, with an additional 20% stored for liability.

If a member country wants access to their own money, they must do it in the form of a loan, which must be paid back, INCLUDING INTEREST AND COMMISSION. Yes... France charges African countries INTEREST IN ORDER TO ACCESS THEIR OWN MONEY. To add insult to injury, France will only grant access to that money if the countries's financial documents look stable enough...which they usually never do, because the CFA Franc system is designed such that there is little to no financial strength.

Below is a video from @ADDIMovement, the African Union's representative to the USA. She illustrates just how perverse this French-imposed colonial era system is.

France does not offer full transparency as to how they utilize the stolen— I mean stored, wealth from Africa, but large amounts of it gets invested into the French stock market in order to artificially keep itself propped up.

According to @ADDIMovement, for every \$14 Billion of African wealth that France invests in their stock market, the French treasury makes \$300 Billion profit in return. This is over the course of the past 50-60 years that France has imposed the CFA Franc system on Africa. That is roughly a 6% annual growth.

Meanwhile, the Africans nations only realize a growth of 0.311% (historical French treasury bond rates) for their wealth stored in the French treasury.

This means that for every \$14 Billion stores in Africa, the Africans have only realized a growth of \$2.5 Billion for the past 50-60 years. While the French have locked the remaining ~\$285 Billion FOR THEMSELVES.

It is worth repeating that African nations are almost never able to access THEIR OWN MONEY, while France gets to profit off of it at the tune of HUNDREDS OF BILLIONS. Such was the case after the 2008 financial crisis. After the 2008 crisis, African nations wanted to access their own money for economic recovery, but France would only allow it for countries whose financials were arbitrarily deemed stable enough... by France. And on top of that, France would only allow it in the form of a loan, which would need to be paid back at the commercial interest rates.

TLDR: the bottom line is that France did everything it can to ensure they stole as much wealth as possible from Africa to enrich their own country, while their former colonies remain completely impoverished.

[video link](#)

26 August 2023: “CRITICAL UPDATE ON NIGER: The new Nigerien administration has put its military on maximum alert, in anticipation of an ECOWAS military strike any moment.

Military attack fears in Niger have peaked remarkably in the last few days. Interestingly, these attack fears began hitting home after the report that France had sought Algeria’s permission to use its airspace in a military strike on Niger, which Algeria reportedly declined. France denied it had made such request. Most recently, French President, Emmanuel Macron lost his cool and lashed out at the Nigerien junta for the continued detention of the ousted pro-France former president of Niger, Mohamed Bazoum. Coincidentally, days after his outburst and pressure on ECOWAS to act, the security situation in Niger deteriorated remarkably, leading the Nigerien junta to raise security alert levels in the country.

In fact, about two days ago, precisely Thursday the 24th of August, 2023, the foreign ministers of both Niger, Mali and Burkina Faso met in Niger’s capital, Niamey to discuss boosting cooperation on security and other issues of concern. By the close of that meeting, the head of the Nigerien junta, Abdourahmane Tchiani eventually signed TWO ORDERS “authorizing the Defense and Security Forces of Burkina Faso and Mali to intervene on Nigerien territory in the event of an attack.”

So, all that talk and threat from Mali and Burkina Faso, that any attack on Niger will be treated as an attack on both countries, has now been officially activated through those orders signed by Tchiani. Basically, things have gone from rhetoric to real action.

About a day ago, Vladimir Putin assured African countries in which Wagner PMC has presence that they have nothing to worry about over the sudden demise of Yevgeny Prigozhin, insisting that Wagner will fulfill its obligations to those countries (including Niger) and even do more.

Earlier today, Saturday, Nigerians once again held a massive pro-military rally, virtually filling the 30,000 capacity Seyni Kountche stadium in Niamey where they waved Nigerien, Algerian and Russian flags, chanting anti-France slogans and openly declaring their support for the military junta.

“We have the right to choose the partners we want, France must respect this choice,” said Ramatou Ibrahim Boubacar, a model wearing Nigerien flags from head to toe.

“For 60 years, we have never been independent, only since the day of the coup d’etat,” she said. (AJ)

Boubacar added the country fully supports the National Council for the Safeguard of the Homeland (CNSP), which seized power after President Mohamed Bazoum’s government was overthrown on July 26.

ECOWAS has maintained its not starting any war with Nigeriens, probably given the continent wide rejection of any military intervention in Niger, but news out of Niger implies otherwise, as the junta believes ECOWAS is under immense pressure and is actually planning to carry out its threat of military intervention, any time.

On Friday, Niger’s foreign ministry announced that French ambassador Sylvain Itte had 48 hours to leave, saying he refused to meet with the new rulers and citing French government actions that were “contrary to the interests of Niger”.

Paris rejected the demand, saying that “the putschists do not have the authority to make this

request”.

“The French ambassador, instead of leaving, thinks this is the land of his parents,” said Idrissa Halidou, a healthcare worker and CNSP member. “We are people of war, we are ready to fight against [ECOWAS].” (AJ)

The new American Ambassador to Niger, Kathleen Fitzgibbons equally refused to report to the junta saying they’re not the legitimate leaders. There are now rumors that after France, other Ambassadors who are uncooperative may also be asked to leave as the drums of war beat louder and louder.

FYI, the coup is one month today. Rooms for more dialogue still abound. Why this maniacal rush to war if not to set our region on fire?

May Africa win!” —[J. C. Okechukwu](#)

Nigeria

12 August 2023: “Nigerian military warns about plot to instigate army to overthrow president Tinubu

The Nigerian Armed Forces High command says there are plots from different quarters to instigate members of the army of Nigeria to overthrow the present administration led by Bola Tinubu.

Spokesman for the Nigerian Armed Forces, however, told that the military does not express dissatisfaction with the existing system in the country and will not allow itself to be involved in any actions against current administration.” —[DD Geopolitics](#)

nil

keyword: Objective-C word

keyword: Ruby reserved word

no

keyword: COBOL reserved word (z/OS)

keyword: NO (all caps) Objective-C word

noaudit

keyword: SQL reserved word (Oracle)

no_cache

keyword: SQL reserved word (z/OS)

nocompress

keyword: SQL reserved word (Oracle)

nonatomic

keyword: Objective-C word

nor

keyword: VHDL reserved key word

Nord Stream bombing

On 26 September 2022, both Nord Stream 1 and Nord Stream 2 natural gas pipelines were bombed. Prior to the event, top U.S. officials threatened to destroy the pipelines, but after the event the U.S. has suppressed any investigation into who did the bombing.

28 August 2023: “The world is resetting completely. The post-war order is collapsing. NATO is going to collapse. You can’t have the driver of NATO, which is the US, sabotage Germany’s main source of cheap energy. The Biden administration blew up Nord Stream. It was the biggest act of industrial sabotage in history, the largest manmade CO2 emission in history, and an attack on Germany.” —Tucker Carlson

Norfolk Island pine

25 December 2023: “The Norfolk Island pine is a species of conifer native to Norfolk Island. The tree is slow growing and in its natural habitat can reach 60 m (200 ft) with a straight trunk often measuring 3 m (10 ft) in diameter. Found in the coastal regions of Norfolk Island, the trees tolerate high winds and soil that is sandy with high salt concentrations. The pines are in demand for use in woodturning, a decorative art that uses a lathe to carve wood. Because Norfolk Island pines resemble Christmas trees, they are popular gifts and houseplant choices during the holiday season. Grown indoors, the trees remain small as opposed to their natural habitat height.” —CIA World Factbook (material that expires after 30 days)



North Korea

2 September 2023: “North Korea fires cruise missiles towards Yellow Sea: South Korean military

Missile launches come as South Korean and US forces conclude joint military exercises on Korean Peninsula.

North Korea has fired several cruise missiles towards the sea off the west coast of the Korean Peninsula, South Korea’s military said.

The launches early on Saturday morning follow just days after North Korea launched two ballistic missiles into waters off its east coast in what it described as a simulated “nuclear strike” on targets in South Korea.

Details of the latest missile launches towards the Yellow Sea at approximately 4am local time on Saturday (19:00 GMT on Friday) are being analysed by South Korean and United States intelligence authorities, South Korea’s Joint Chiefs of Staff said in a statement.” —[Aljazeera](#)

NOS (Network Operating System)

abbreviation

operating system

Proprietary OS by Control Data Corporation.

NOS/BE NOS Batch Environemnt

abbreviation

operating system

Proprietary OS by Control Data Corporation.

Ran on the 6x00 and related Cyber. —[Wikipedia: List of operating systems](#)

SCOPE

NOS/VE NOS Virtual Environment

abbreviation

operating system

Proprietary OS by Control Data Corporation.

not

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: Ruby reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

noteq

keyword: SQL reserved word (z/OS)

note-off

keyword: MIDI comamnd

8n hex (where n is the channel number)

2 paraaemters

paramater 1: key

paramater 2: velocity

note-on

keyword: MIDI comamnd

9n hex (where n is the channel number)

2 paraaemters

paramater 1: key

paramater 2: velocity

Novell DOS 7

operating system

Proprietary OS by Digital Research, Inc.

Derived from DR-DOS 3.31-6.0

a single-user, multi-tasking system derived from DR DOS — [Wikipedia: List of operating systems](#)

DOS
DR-DOS

Novell PalmDOS 1.0

operating system

Proprietary OS by Digital Research, Inc.

Derived from DR-DOS 3.31-6.0 — [Wikipedia: List of operating systems](#)

DOS
DR-DOS

Novell “Star Trek”

operating system

Proprietary OS by Digital Research, Inc.

Derived from DR-DOS 3.31-6.0 — [Wikipedia: List of operating systems](#)

DOS
DR-DOS

nowait

keyword: SQL reserved word (Oracle)

null

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: Java reserved literal value word

keyword: JavaScript reserved word

keyword: NULL (all caps) Objective-C word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

Null Island

The location at 0° latitude and 0° longitude (0°N 0°E) in the Gulf of Guinea is called “Null Island”. There is no island, but there is a permanently-moored weather buoy.

nulls

keyword: COBOL reserved word (z/OS)

null test

29 December 2023: “Null test

If you take two identical sounds and play them simultaneously, but with reversed polarity on one of the sounds, two waves will perfectly cancel each other and you will hear nothing

If there is a difference between two signals, you will hear only this difference

Null test is widely used for different purposes

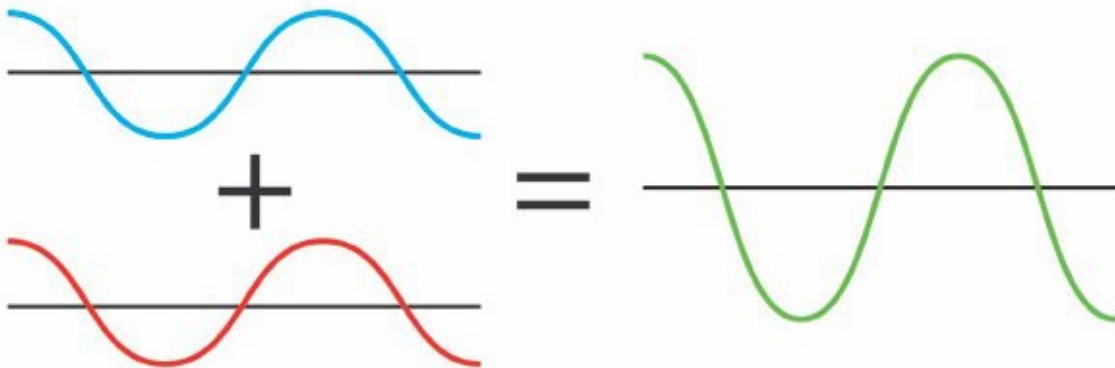
But my small workflow that I wanted to share, and it's related to null test is this:

Sometimes you can get a session with tracks duplicated for no reason. It is not L and R channels. It's just 2 duplicates of the same track.

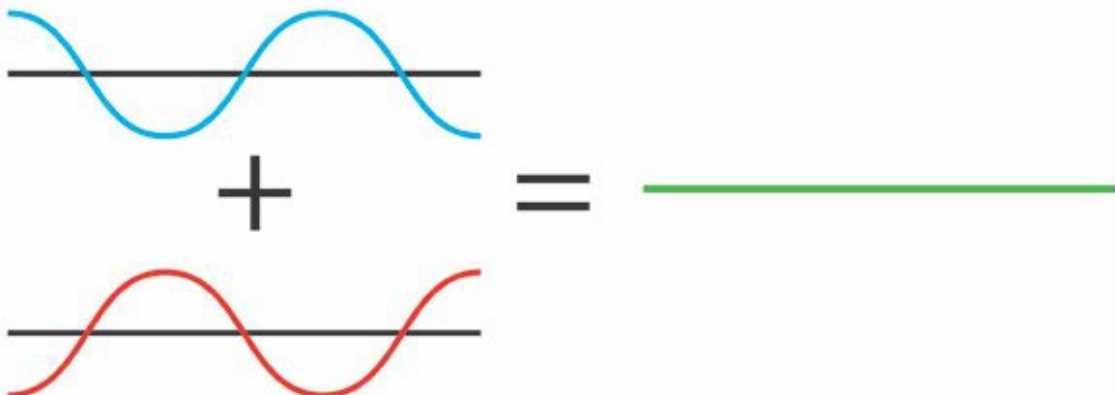
To quickly understand if these tracks are absolutely identical, I flip the phase on one of them, and if I hear no sound, it means I can delete unnecessary copy and keep my project cleaner, more organized.

If I for some reason will need a copy I can always create it, but initially I don't like having no copies in my session.” — [Nathaniel W.](#)

In-phase



180° Out of Phase



number

keyword: COBOL reserved word (z/OS)

keyword: Number (initial cap) JavaScript object

keyword: SQL reserved word (Oracle)

numeric

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

numeric-edited

keyword: COBOL reserved word (z/OS)

nunchaku

noun “An instrument consisting of two or more handles (sticks, clubs, bars, or rods) connected by a rope, cord wire or chain, in the design of a weapon (Penal Code Section 16940)”
[from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

See: nutritional supplements

NYPD

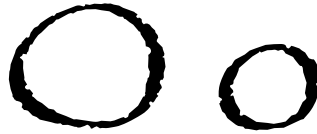
2 June 2023 “Happy Pride Month! Over the years, Gay Officers Action League has

demonstrated unwavering commitment to promoting universal acceptance and inclusion for all members of the LGBTQIA+ community. Their remarkable contributions to this city and the department defines New York's Finest.” —[Commissioner Sewell](#)



Look closely and you will notice that the artist placed the phrase “ALL COLORS ARE BEAUTIFUL” or “ACAB” in the logo under “Happy Pride Month”.

25 August 2023: “The NYPD has stopped tens of thousands of pedestrians since Mayor Eric Adams took office claiming someone “fit a relevant description” or citing a vague reason like “other.” Just 5% of them were white, revealing racial disparities even starker than at the height of former Mayor Michael Bloomberg’s “stop and frisk” era.” —[Gothamist](#)



O

ASCII: 4F hex

UNICODE: LATIN CAPITAL LETTER O

o

ASCII: 6F hex

UNICODE: LATIN SMALL LETTER O

oat

botanical information:

Botanical name: *Avena* spp. (approximately 30 species); especially *Avena sativa*

Common name: oat, oats

Avena sativa is common oats.

Family: Poaceae (grasses)

origin:

Origin: The wild ancestor of *Avena sativa* and *Avena byzantina* (a closely related crop) is *Avena sterilis*. *A. sterilis* is originally from the Fertile Crescent of the Near East.

history:

History: The wild ancestor of *Avena sativa*, modern oats, is *Avena sterilis*. *A. sterilis* is originally from the Fertile Crescent of the Near East. Oats (like rye) started as a weed that grew near wheat and barley. As barley and wheat spread to cooler, wetter locations, oats became domesticated crops.

History: Oats were found at Gilgal I, a village site in the Jordan Valley north of ancient Jericho, from approximately 11,400 years B.P. (Before Present).

History: Oatmeal raisin cookies were U.S. President Jimmy Carter's favorite kind of cookie.

nutritional information:

Oats are a good source of protein.

Oats are a food that increases sexual energy and enhances fertility.

Oatmeal is high in soluble fiber. 1/3 cup of cooked oatmeal or 1/2 ounce of dry oatmeal is approximately 9 grams of carbohydrates. In 100 grams of oatmeal there are 13 grams of protein, 8 grams of fat, and 67 grams of carbohydrates. The carbohydrates in oatmeal are mostly complex, giving oatmeal a low Glycemic Index. Oatmeal has high levels of fat-burning antioxidants (especially good at getting rid of belly fat).

Oatmeal is one of the few foods on earth that has Gamma Linolenic Acid (GLA). GLA is an activated Essential Fatty Acid made from Linoleic Acid and a precursor of Dihomo Gamma Linolenic Acid (DGLA), a source of good eicosanoids.

One packet of low sodium instant oatmeal has 0.8 milligrams of zinc, which is 6% of the U.S. Recommended Daily Value, according to the U.S. National Institutes of Health.

Oatmeal helps cholesterol and helps fight cancer, diabetes, and obesity.

Chinese herbalism:

Chinese gender: slightly yang (slightly warm)

Chinese flavor: sweet

Ayurvedic herbalism:

Oats are an excellent food for those who have Vata constitution or those on an anti-Vata diet (high degree for reducing Vata).

external care:

External skin care: Oatmeal dries out the skin and is excellent for combatting acne.

astrological correspondences:

Astrological planet: Venus 

magickal correspondences and uses:

Western element: earth

Venus spells: Oats in Venus spells involving beauty, compassion, fidelity, friendship, happiness, interchanges, joy, love, luck, meditation, pleasure, reconciliation, and youth.



See: oatmeal

Barack Obama

“I mean, you got the first mainstream African-American who is articulate and bright and clean and a nice-looking guy. I mean, that’s a storybook, man.” —Joe Biden speaking about Barack Obama, 31 January 2007

26 July 2023: “I don’t really understand how Barack Obama can today talk about the climate crisis with a straight face after he delivered this speech in the same month climate scientists were warning of record-breaking temperatures.” —[David Sirota](#)

“Now, under my administration, America is producing more oil today than at any time in the last eight years. (Applause.) That’s important to know. Over the last three years, I’ve directed my administration to open up millions of acres for gas and oil exploration across 23 different states. We’re opening up more than 75 percent of our potential oil reserves offshore. We’ve quadrupled the number of operating rigs to a record high. We’ve added enough new oil and gas pipeline to encircle the Earth and then some.” —[White House Archives](#)

4 August 2023 (the day when the Democrats celebrated Obaam’s 62nd birthday): “The man who turned Libya from the country that had the highest standard of living in Africa into a war-torn failed state, and dropped so many bombs on Syria that he literally ran out of bombs.” —[sarah](#)

4 August 2023: “Obama destroyed Libya, murdered Gaddafi, killed more innocent civilians with drone strikes than Bush, punished no one for our torture program, saved the Banks while millions lost their homes, and Black people lost wealth under his reign.” —[Blakc in the Empire](#)

5 August 2023: “ ‘Only in shallow, self-absorbed, privileged America could a leader drop 26,000 bombs on 7 countries in a single year & have the citizens mourn the end of his term

because he looked & sounded classy while doing it.’ - author unknown

“President Obama holds the world record for the most children killed by a Nobel Prize winner.” — [Whirled Peas](#)

Michelle Obama



See: .obj — file extension

object

keyword: COBOL reserved word (z/OS)

object-computer

keyword: COBOL reserved word (z/OS)

Object

keyword: JavaScript object

oboe

Q: What's the difference between an oboe and a bassoon?

A: You can hit a baseball further with a bassoon.

obtuse triangle

noun

geometry A triangle in which one of the interior angles is an obtuse angle (greater than 90°).

Also called obtuse-angled triangles.

Alexandria Ocasio-Cortez



Alexandria Ocasio-Cortez ✨
@AOC

...

FYI there's a fake account on here impersonating me and going viral. The Twitter CEO has engaged it, boosting visibility.

It is releasing false policy statements and gaining spread.

I am assessing with my team how to move forward. In the meantime, be careful of what you see.

10:35 AM · May 30, 2023 · **10.6M** Views

12.2K Retweets **2,627** Quotes **79.9K** Likes **537** Bookmarks

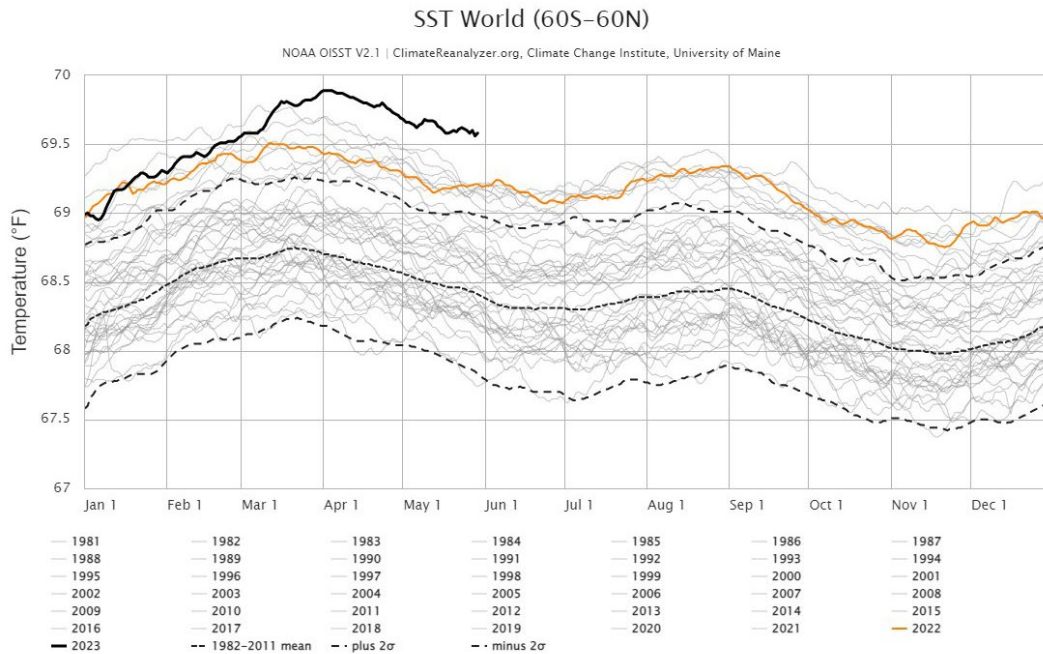
“FYI there's a fake account on here impersonating me and going viral. The Twitter CEO has engaged it, boosting visibility.

It is releasing false policy statements and gaining spread.

I am assessing with my team how to move forward. In the meantime, be careful of what you see.” — [Alexandria Ocasio-Cortez](#)

ocean

“I have no words. The world’s oceans are 0.4°F warmer right now than any other year on this date on record. A single year...sitting 0.4°F above the previous daily record. How do we even tell the public this?” —[Edgar McGregor](#), San Jose State University climate scientist, 31 May 2023



occurs

keyword: COBOL reserved word (z/OS)

octet_length

keyword: SQL reserved word (z/OS)

octopus

23 August 2023: “Deep off central California, thousands of octopus (*Muusoctopus robustus*) migrate through cold dark waters to hydrothermal springs near an extinct volcano to mate, nest,

and die, forming the largest known aggregation of octopus on Earth. Warmth from the springs plays a key role by raising metabolic rates, speeding embryonic development, and presumably increasing reproductive success; we show that brood times for females are ~1.8 years, far faster than expected for abyssal octopods. Using a high-resolution subsea mapping system, we created landscape-scale maps and image mosaics that reveal 6000 octopus in a 2.5-ha area. Because octopuses die after reproducing, hydrothermal springs indirectly provide a food supplement to the local energy budget. Although localized deep-sea heat sources may be essential to octopuses and other warm-tolerant species, most of these unique and often cryptic habitats remain undiscovered and unexplored.” —[Science Advances](#)

occupied

noun “Someone in a structure, vehicle, or aircraft” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]


Mark O’Dowd

Mark O’Dowd recruited me to join the high school chess team.

Mark O’Dowd always greeted with a cheerful phrase and hand gesture. I don’t recall the exact greeting and gesture, but it always made me feel welcome.

Mark O’Dowd called me the day Pink Floyd’s *Dark Side of the Moon* was released and told me I had to come to his house. He didn’t tell me why. When I arrived, he told me I had to get high (cannabis) and then played the entire record from me.

Mark O’Dowd was captain of our high school chess team, which I was a member of.

See: `.odg`  — file extension

See: `.ods` — file extension

See: `.odt` — file extension

of

part of speech: preposition

Oxford English Corpus (OEC) rank: #4

Corpus of Contemporary American English (COCA): #4

Dolch level: Grade 1

Polysemy: 12

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

The word “of” is a versatile preposition that is commonly used to indicate a relationship between two or more things. Here are some common definitions and uses of the word “of”:

[ChatGPT]

1. **Possession:** “of” is often used to indicate possession or ownership. For example:

[ChatGPT]

- “The book is on the shelf of the library.” [ChatGPT]
- “The color of her eyes is blue.” [ChatGPT]
- “The key to the door is made of gold.” [ChatGPT]

2. **Origin or source:** “of” can denote the origin or source of something. For example:

[ChatGPT]

- “The painting is the work of a famous artist.” [ChatGPT]
- “He is a citizen of France.” [ChatGPT]
- “The smell of freshly baked bread filled the room.” [ChatGPT]

3. **Content or composition:** “of” can indicate the content or composition of something.

For example: [ChatGPT]

- “A cup of coffee.” [ChatGPT]
- “A piece of cake.” [ChatGPT]
- “A bottle of water.” [ChatGPT]

4. **Partitive or fractional relationship:** “of” is often used to express a partitive or fractional relationship. For example: [ChatGPT]

- “Two-thirds of the population voted in the election.” [ChatGPT]
- “I ate a slice of pizza.” [ChatGPT]
- “She drank a glass of milk.” [ChatGPT]

5. **Description or quality:** “of” can be used to describe or indicate a particular quality or characteristic. For example: [ChatGPT]

- “A man of great wisdom.” [ChatGPT]
- “A city of vibrant culture.” [ChatGPT]

- “A woman of immense talent.” [ChatGPT]
6. **Time or measurement:** “of” can be used to indicate a time or measurement. For example: [ChatGPT]
- “The clock struck a quarter of seven.” [ChatGPT]
 - “She was born in the month of May.” [ChatGPT]
 - “He ran a distance of ten miles.” [ChatGPT]
7. **Part of a larger whole:** “of” can be used to indicate that something is a part or component of a larger whole. For example: [ChatGPT]
- “The wheels of the car.” [ChatGPT]
 - “The pages of the book.” [ChatGPT]
 - “The branches of the tree.” [ChatGPT]

It’s important to note that the context in which “of” is used can determine its specific meaning and function. [ChatGPT]

off

keyword: COBOL reserved word (z/OS)

offline

keyword: SQL reserved word (Oracle)


offscreenBuffering

keyword: JavaScript windows property

offshoring capital

22 July 2023: “Prior to Reagan, stock buybacks, offshoring capital and tax havens were all illegal in the United States, it was even enforced, today these techniques are weaponized by the ruling class to steal trillions of dollars away from the general population each year.” —[MC Squared](#)

See: .oft — file extension

See: .ogg  — file extension

See: .ogv  — file extension

Oklahoma panhandle

“Did you know; under the Missouri Compromise (1820), Texas could not be a slave state if its borders extended north of $36^{\circ} 30'$. So Texas shortened its lands deliberately north of $36^{\circ} 30'$ and gave them to the United States. In doing so, Texas could remain a slave state, and what would later become the southern border of the Oklahoma Panhandle or better known as no man's land.” —[Kenny Akers](#)



King Olav V

“King Olav V of Norway insisted on paying his fare when using public transit.” —[Etaoin](#)

[Shrdlu](#)



old growth forests

“Protecting and restoring mature and old-growth forests on America’s public lands is the cheapest, most effective way to pull carbon from our atmosphere, while at the same time protecting important wildlife habitat and ensuring clean drinking water.” — [Earthjustice](#)

OldLace

keyword: HTML color name

OldLace
#FDF5E6

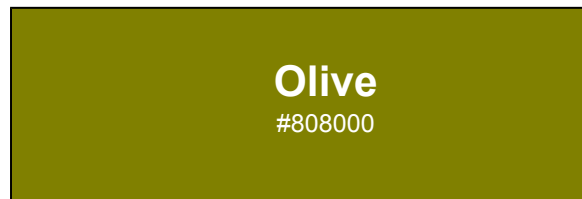
oligarphy

“OLIGARCHY — Government by the few (usually absolute) rulers who are co-equal.” — Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

29 December 2023: “This is what oligarchy is about. Today just 3 Wall Street firms, BlackRock, Vanguard & State Street manage \$20.7 trillion in assets. These 3 firms are major shareholders in 95% of S&P 500 companies. Democracy will not survive with this concentration of economic & political power.” —[Bernie Sanders](#)

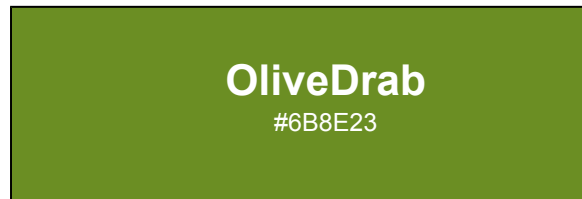
Olive

keyword: HTML color name



OliveDrab

keyword: HTML color name



omitted

keyword: COBOL reserved word (z/OS)

on

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

keyword: VHDL reserved key word

onblur

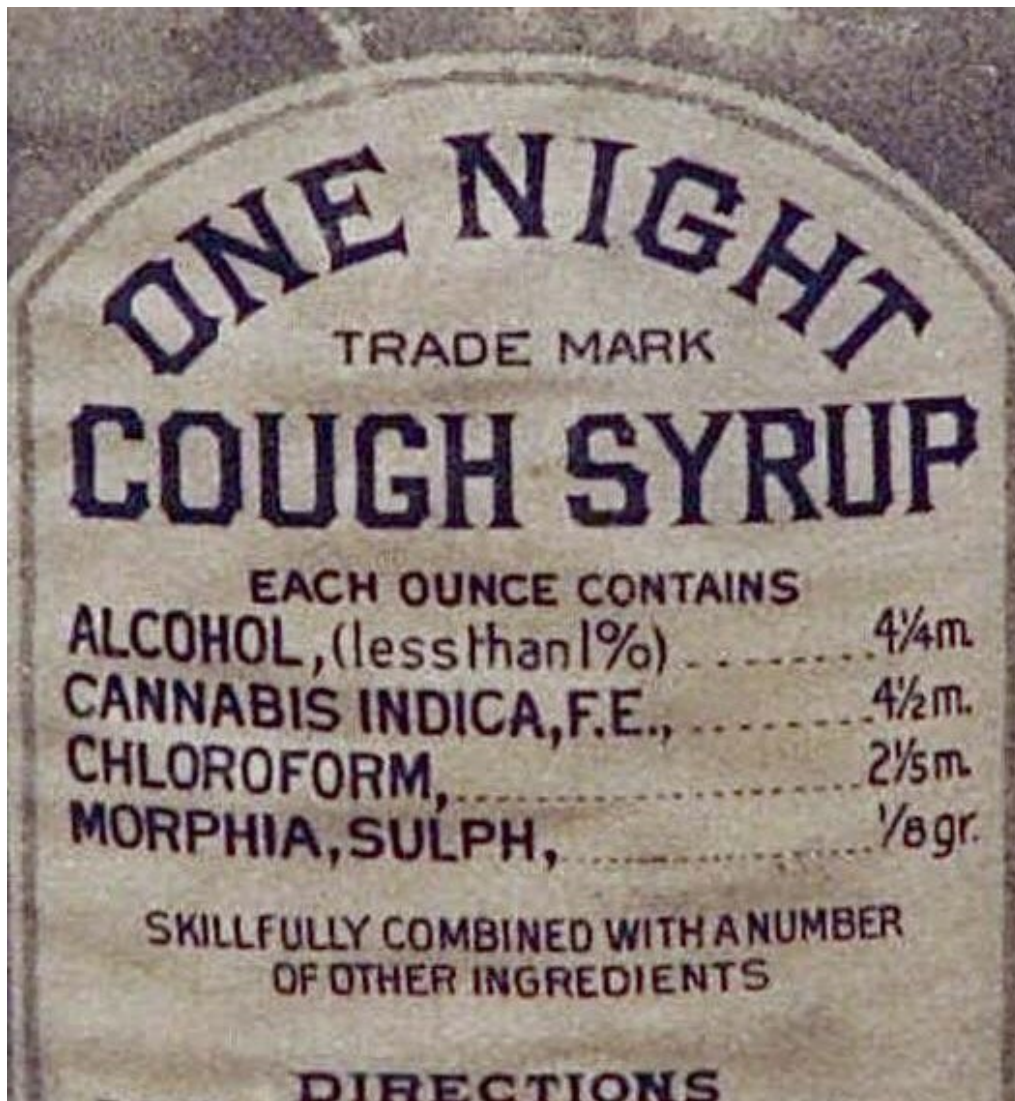
keyword: JavaScript event handler

onclick

keyword: JavaScript event handler

One Night Cough Syrup

“There weren’t strict labeling laws regarding medications in the late 1800s to early 1900s. The “One Night Cough Syrup” was sold in the late 1800s and it may have been the mother of all dangerous cough syrups.” —[Massimo](#)



onerror

keyword: JavaScript event handler

oneway

keyword: Objective-C former reserved word

onfocus

keyword: JavaScript event handler

onkeydown

keyword: JavaScript event handler

onkeypress

keyword: JavaScript event handler

onkeyup

keyword: JavaScript event handler

onload

keyword: JavaScript event handler

onmousedown

keyword: JavaScript event handler

onmouseover

keyword: JavaScript event handler

onmouseup

keyword: JavaScript event handler

onsubmit

keyword: JavaScript event handler

open

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows method

keyword: VHDL reserved key word

opener

keyword: JavaScript windows property

OpenVMS

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise.

alternate name for VMS

VMS

Oppenheimer

20 July 2023: “Can’t wait for the Oppenheimer buzz to die. The bomb those men built? They dropped in on New Mexico to test it. On my mother. She was 18 months old, in the fallout zone. Of the 21 girls in her high school class, 17 had leukemia. Tell THAT fucking story, Hollywood.

Internal documents show they initially sought to test it on “a third world country” but worried about diplomatic relations. They opted to drop it on rural New Mexico because it was “nothing but cows and Mexicans” out here.

Tell THAT fucking story.

Stop glorifying monsters.

And you know what sucks? Nuclear weapons are such a huge industry here that I am actually worried that tweeting angrily about my government giving my mother cancer and a brain tumor will get me in trouble with prospective employers. This is the world I inhabit here.

Like, I should just allow my mom to take one for the team, as a baby who had a nuclear bomb literally dropped on her by her own government. The labs are among the biggest employers in my state. Everyone is beholden to them in some way. I’m tired yall

“Yes, we understand and we are sorry you’re so upset. You do realize using the F word will offend people, right?”

But not radiating toddlers. That’s not offensive at all.

New Mexico had only been a US state for 30 years at that point.

We were not even human to men like Oppenheimer.

My great grandfather was a sheep rancher. Up before dawn that morning. He thought the sun rose twice that day.

No one warned them.” — [Alisa Lynn Valdés, M.S.](#)

option

keyword: Option (initial cap) JavaScript windows object

keyword: SQL reserved word (ANSI, Oracle)

optional

keyword: COBOL reserved word (z/OS)

See: .opus — file extension

or

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: PHP reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

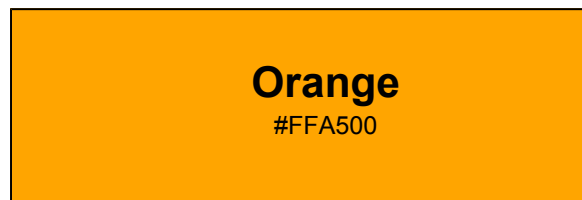
keyword: VHDL reserved key word

Oradour Massacre

Oradour, France on June 10, 1944. Nazi SS soldiers herded the town's entire population of women and children into the church and burned the church down. The men were taken to another town building and shot.

Orange

keyword: HTML color name



OrangeRed

keyword: HTML color name

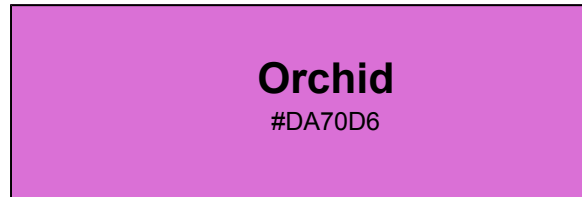


or_bits

keyword: SQL reserved word (z/OS)

Orchid

keyword: HTML color name



order

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

ordered

keyword: SQL reserved word (z/OS)

See: `.dotorf` 📄 — file extension

organization

keyword: COBOL reserved word (z/OS)

George Orwell

“If you can *feel* that staying human is worth while, even when it can’t have any result whatever, you’ve beaten them.” —*1984*, George Orwell (Eric Blair)

“The sinister fact about literary censorship in England, is that is it largely vountary. Unpopular ideas can be slienced, and inconvenient facts kept dark, without the need for any official ban.” —George Orwell (Eric Blair)

OS/8

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

OSE

abbreviation

operating system

Proprietary OS by ENEA AB

Flexible, small footprint, high-performance RTOS for control processors — [Wikipedia: List of operating systems](#)

OS/IV

abbreviation

operating system

Proprietary OS by Fujitsu

See: .ost — file extension

OS X

operating system

Proprietary OS by Apple for the Apple Macintosh.

Apple Macintosh

osteroporosis

Osteroporosis is a medical condition in which the bones become brittle and fragile from loss of tissue, typically as a result of hormonal changes, or deficiency of calcium or vitamin D.

other

keyword: COBOL reserved word (z/OS)

others

keyword: Ada reserved key word

keyword: VHDL reserved key word

out

keyword: Ada reserved key word

keyword: Objective-C former reserved word

keyword: VHDL reserved key word

outer

keyword: SQL reserved word (z/OS)

outerHeight

keyword: JavaScript windows method

outerWidth

keyword: JavaScript windows method

output

keyword: COBOL reserved word (z/OS)

outro

12 October 2023: “outro cheat sheet” — [Solar Heavy](#)



overflow

keyword: COBOL reserved word (z/OS)

overlaps

keyword: SQL reserved word (z/OS)

override

keyword: COBOL reserved word (z/OS)

overriding

keyword: Ada reserved key word

oversampling

25 December 2023: “What is oversampling?

What does x2, x4 mean?

Basically oversampling forces the plugin to process the sound in higher sample rate.

· Example: You run a session in 48.0k

Oversampling 2x means that the sound will be processed in a sample rate 2x more than your session.

In that case, it will be 96.0k

· Why is that important?

First of all, you need to know, that the highest frequency in your frequency range that you work with in your session equals half of your sample rate.

$48000/2 = 24000$

Hence, at 48.0k you have 0-24000hz range to work with.

How is it related to oversampling?

Shortly speaking, you reduce unwanted distortion that happens when you want to saturate your sound but the range you have is not enough to create new harmonics and they start to mirror back into the audible range, sounding dirty.

By increasing the frequency range, these harmonics will mirror back to non-audible range and allow your audio to sound more clean.

Let's take our example. With 2x oversampling, or 96.0k sample rate, you will have 0-48000 hz range to operate with, hence more headroom in the spectrum to create new harmonics, leaving a cleaner sound in audible range.

Of course it will require additional CPU since the plugin needs to process 2x more information. That's why using oversampling is more efficient than running the whole session in 96.0 khz. Just using it where it's really needed.

· Use oversampling on plugins that introduce saturation, including analog modeled EQs and compressors.” —[Nathaniel W.](https://twitter.com/natemixing/status/1739419979571663200)

owl

3 September 2023: “Flaco, the Eurasian eagle-owl of Central Park, late last night at his favorite hunting ground, the construction site. Yesterday was the 7-month anniversary of someone cutting his enclosure at the zoo, allowing him to escape and ultimately live life as a free owl in NYC.” —[Molly Bangles](#)



P p

P

ASCII: 50 hex

UNICODE: LATIN CAPITAL LETTER P

p

ASCII: 70 hex

UNICODE: LATIN SMALL LETTER P

package

keyword: Ada reserved key word

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: VHDL reserved key word

packed-decimal

keyword: COBOL reserved word (z/OS)

padding

keyword: COBOL reserved word (z/OS)

page

keyword: COBOL reserved word (z/OS)

page-counter

keyword: COBOL reserved word (z/OS)

pageXOffset

keyword: JavaScript windows method

pageYOffset

keyword: JavaScript windows method

Thomas Paine

“Government, even in its best state, is but a necessary evil; in its worst state, an intolerable one.” —Thomas Paine /p>

“The accumulation of great wealth is, in many instances, the effect of paying too little for the labor that produced it, the consequence of which is that the working people perish in old age and the employer abounds in affluence.” —Thomas Paine

“He that would make his own liberty secure must guard even his enemy from oppression; for if he violates this duty he establishes a precedent that will reach to himself.” —Thomas Paine

“Party knows no impulse but spirit, no prize but victory. It is blind to truth, and hardened against conviction...A man under the tyranny of party spirit is the greatest slave upon the earth, for none but himself can deprive him of the freedom of thought.” —Thomas Paine

“I prefer peace. But if trouble must come, let it come in my time, so that my children can live in peace.” —Thomas Paine

pain management

11 August 2023: “DR: Your MRI shows you need hand surgery

Me: What if I can’t afford surgery?

Dr (with surprised look): It’s your hand, don’t you want to keep/use your hand?

These fking pricks think I can pull 6 grand out of my ass and I’m just an idiot for asking.

#DoctorsAreAssholes ” —[Profane Worker](#)

11 August 2023: “Pain management doctor looks at my x-rays, MRI & CT scan & says, “This is the first time you’ve sought care for your back???”

Me: “Ahhhh, yes. For 40 years I couldn’t afford insurance because I’m American. We learn to live with the pain”

They act like this doesn’t happen” —[Stacey](#)

Pakistan

10 August 2023: “STUNNING: Secret Pakistan cable reveals explicit US pressure to remove democratically elected leader Imran Khan—which immediately followed.

The document cites US frustration at Pakistan’s “aggressively neutral” stance on Ukraine.

It then states that US-Pakistan relations will suffer *unless* Khan is removed by a no confidence vote.

This follows months of the US government repeatedly denying that the meeting took place.

Khan long claimed that the State Dept met with Pakistani military officials to threaten Pakistan with punishments if they didn’t remove him.

US State Dept spokesman (and prior MSNBC personality) @StateDeptSpox repeatedly denied this happened as reporters laughed with him.” —[System Update](#)

PaleGoldenRod

keyword: HTML color name

PaleGoldenRod

#EEE8AA

PaleGreen

keyword: HTML color name

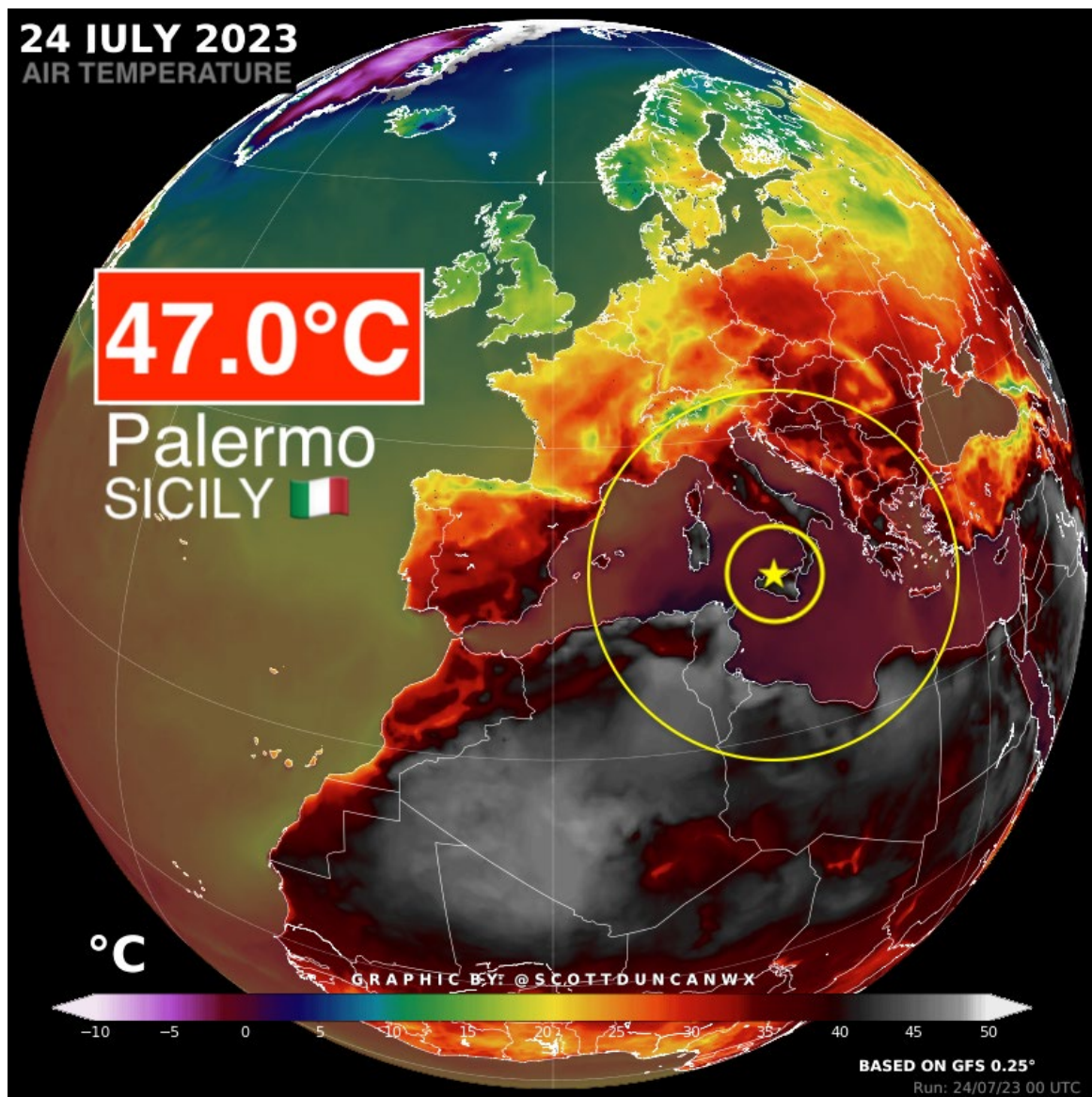
PaleGreen

#98FB98

Palermo, Sicily

24 July 2023: “BREAKING: Palermo in Sicily has just obliterated its all-time heat record by over 2°C. The previous record was +44.8°C in August 1999.

The observatory has weather data dating back to 1791. This is a very significant record to fall by such an enormous margin.” —[Scott Duncan](#)



Palestine

Ancient Egyptian records:

1210 BCE is first reference to the Peleset (Palestinians)

1206 BCE is the first reference to the Ysrir (Israelis, then pagans)

Palestine founded 1175 BCE

Kingdom of Israel founded ca. 900 BCE

Kingdom of Judah founded ca. 850 BCE

Judaism invented around 6th or 5th century BCE

Zionism invented in 1875.

“The right of the Jewish people to the land of Israel is eternal and indisputable ... between the Sea and the Jordan there will only be Israeli sovereignty.”

--Likud Party Charter, 1977

Polish lawyer Raphael Lemkin coined “genocide” in 1944 in his *Axis Rule in Occupied Europe*, page 19, from Greek γένος or *genos* “race, kind” and Latin *-cide* “a killing”.

Lemkin used it to describe the Nazi occupation of Poland, later the Nazi genocide of Jews and Roma, Turkish genocide of Armenians, Roman sacking of Carthage, and Mongol invasions.

As is Cato’s “Carthago delenda est” (the full version was “Ceterum (autem) censeo Carthaginem esse delendam”), meaning Carthage must be destroyed.

Be absolutely clear on what Israel means when they say eliminated or destroyed.

When they claim Arab nations aren’t taking Palestinian refugees:

Egypt: 110,00 Palestinian refugees

Iran: 740,000 Afghan refugees, 10,000 Palestinian refugees

Saudi Arabia: 1/2 million to 3 million Syrian refugees; 400,000 Palestinian refugees

Syria: 568,530

Jordan: 2,700,000

Lebanon: 405,425

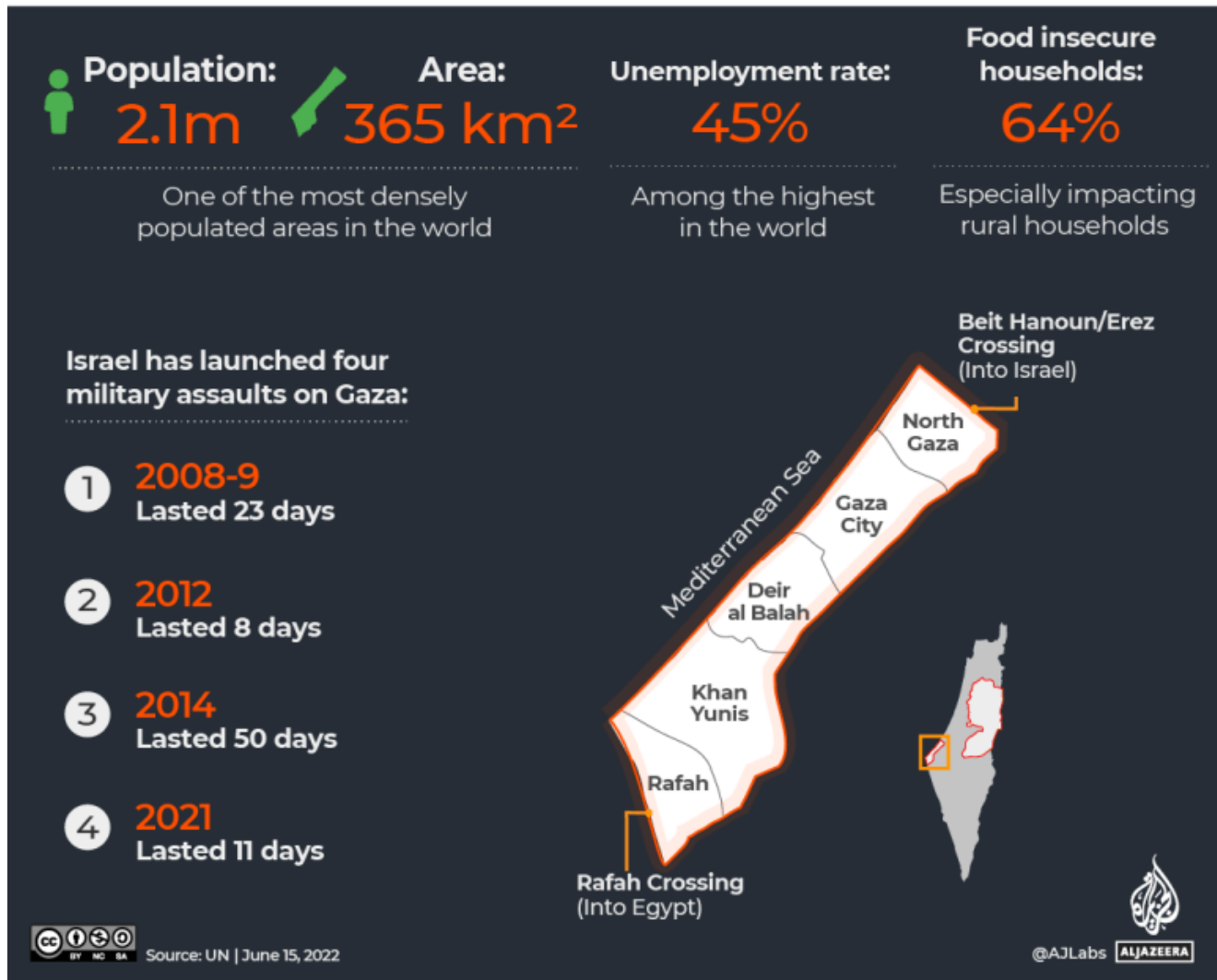
Kuwait: 40,000

Iraq 34,000

ISRAEL/PALESTINE

Gaza: 15 years of living under blockade

Israel's land, air and sea blockade has trapped more than two million people inside the Gaza Strip since 2007. No portion of Gaza's society or economy has been left untouched.



undated: "Our race is the master race. We are the divine Gods on this planet. We are as different from the inferior races as they are from insects." —Menachem Begin, 6th Prime Minister of Israel

undated: "We are fighting against human animals, and we are acting accordingly." —Yoav Gallant, Israeli Defense Minister

undated: "Are you seriously asking me about Palestinian civilians?" —Naftali Bennett, former Israeli Prime Minister

undated: "You must remember what Amalek has done to you." —Benjamin Netanyahu, Israeli Prime Minister

undated: "I don't call them human animals because that would be insulting to animals." —

Ms. Netanyahu

undated: "It's an entire nation out there that is responsible. This rhetoric about civilians not being aware, not involved, it's absolutely not true. ... And we will fight until we break their backs." —Isaac Herzog, Israeli President

undated: "Right now, one goal: Nakba! A Nakba that will overshadow the Nakba of 1948." —Ariel Kallner, Israeli Kessnet member

undated: "Now there is only one goal: Nakba [expulsion of the Palestinians]. A Nakba that will dwarf the Nakba of 1948." —Ariel Kallner, Israeli Kessnet member

undated: "The only thing that should enter Gaza as long as Hamas doesn't release the hostages it holds is not a gram of humanitarian aid, but hundreds of explosives from the Air Force." —Itamar Ben-Gvir, Minister of National Security of Israel

undated: "Human animals must be treated as such. You wanted hell, you will get hell." —Ghassan Alian, Major General in the Israeli Army

undated: "We are dropping hundreds of tons of bombs on Gaza. The focus is on destruction, not accuracy." —Daniel Hagari, IDF Spokesperson

undated: "The emphasis is on damage and not on accuracy." —Daniel Hagari, IDF Spokesperson

undated: "If the international media is objective and shows both sides, it serves Hamas." —Yair Lapid, former Prime Minister of Israel

undated: "The children of Gaza have brought this upon themselves." —Merav Ben-Ari, member of Knesset

undated: "We will turn Gaza into a deserted island." —Benjamin Netanyahu, Prime Minister of Israel

undated: "I am very puzzled by the constant concern which the world ... is showing for the Palestinian people and is actually showing for these horrible inhuman animals." —Dan Gillerman, former Israeli Ambassador to the UN

undated: "Be triumphant and finish them off and don't leave anyone behind. Erase the memory of them. Erase them, their families, their mothers and their children. These animals must not be allowed to live any longer. Nowadays, we have no excuse." —Ezra Yachin, veteran of the Israeli army

undated: "I want to tell the world what they have long known about me in Israel: I don't care about Gaza. I literally don't care about Gaza. They can go swimming in the sea." —Maya Golan, Israeli Minister of Women's Affairs

undated: “Jericho missile! Doomsday weapon! That’s my opinion. Powerful rockets to be fired without borders, Gaza to be smashed and razed to the ground. Without mercy.” —Tally Gotliv, Likud Party member of Knesset

undated: “[Palestinians] should go to Ireland or deserts” —Amichai Eliyahu, Israeli Minister of Heritage; this is a reference Cromwell’s “to hell or to connacht” line urging ethnic cleansing of Ireland.

undated: “We wouldn’t hand the Nazis humanitarian aid. There is no such thing as uninvolved civilians in Gaza.” —Amichai Eliyahu, Israeli Minister of Heritage

undated: “It is a much needed cleasning, yes, but not an ethnic one. Israel is not targeting humans.” —Seth Crosby

undated: “I just want Palestine deleted and the themepark over flattened Gaza to be built already. Enough of the Twitter fingers. There needs to be an invasion now.” —
@Nimafromlondon

120,000 years ago: Humans left the Nile valley and entered the Middle East, at least as far as Palestine.

3740 BCE: “The evolution of languages provides a unique opportunity to study human population history. The origin of Semitic and the nature of dispersals by Semitic-speaking populations are of great importance to our understanding of the ancient history of the Middle East and Horn of Africa. Semitic populations are associated with the oldest written languages and urban civilizations in the region, which gave rise to some of the world's first major religious and literary traditions. In this study, we employ Bayesian computational phylogenetic techniques recently developed in evolutionary biology to analyse Semitic lexical data by modelling language evolution and explicitly testing alternative hypotheses of Semitic history. We implement a relaxed linguistic clock to date language divergences and use epigraphic evidence for the sampling dates of extinct Semitic languages to calibrate the rate of language evolution. Our statistical tests of alternative Semitic histories support an initial divergence of Akkadian from ancestral Semitic over competing hypotheses (e.g. an African origin of Semitic). **We estimate an Early Bronze Age origin for Semitic approximately 5750 years ago in the Levant, and further propose that contemporary Ethiosemitic languages of Africa reflect a single introduction of early Ethiosemitic from southern Arabia approximately 2800 years ago.**”
—[Bayesian phylogenetic analysis of Semitic languages identifies an Early Bronze Age origin of Semitic in the Near East](#)

The major Semitic languages are: Arabic, Amharic (spoken in Ethiopia), Tigrinya (spoken in Ethiopia and Eritrea), Hebrew, Tigre (spoken in Sudan), Aramaic (spoken in Lebanon, Syria, Israel, Iraq and Iran) and Maltese.

2000 BCE: Canaanites lived in the area.

19th century BCE: Jerusalem founded by Canaanites.

The ancient Egyptian name ꜥwšꜥmm means exalted head.

The ancient Canaanite name uru-salim means foundation of Shalim. Shalim is the Canaanite god of the setting sun and the nether world, as well as of health and perfection.

Both recorded around 19th century BCE.

1550-1400 BCE: Palestine and beyond (including parts of what is now Lebanon and Syria) were under the control of the New Kingdom of Egypt, starting under Ahmore I and Thutmose I.

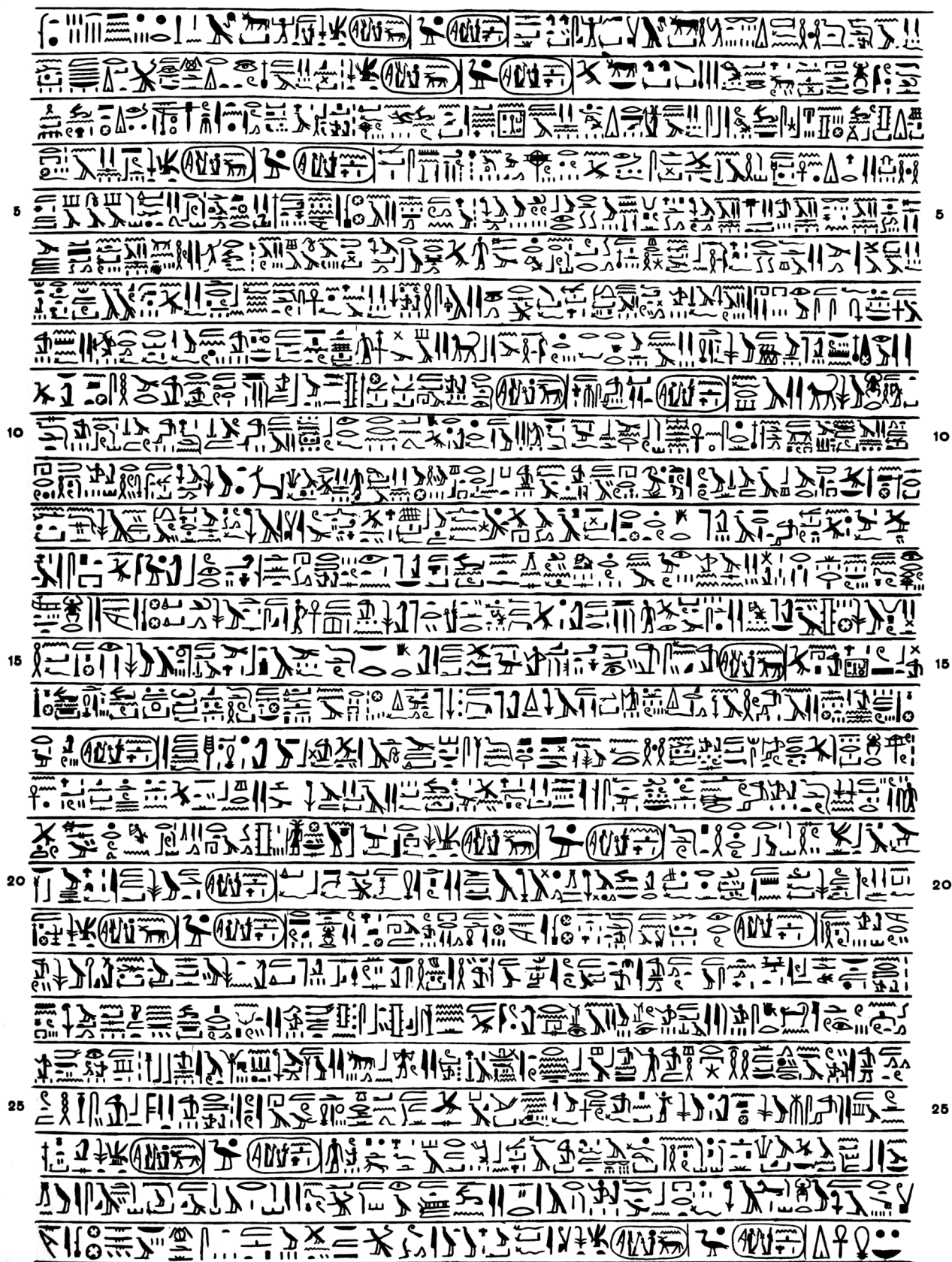
1450-1350 BCE: Palestine was divided into several small nations which were client states of the Egyptians. Chief Adbi-Heba of the Hurrians ruled from the city now called Jerusalem (1st half of the 14th century BCE).

1294 BCE: Seti I reconquered what is now Israel and beyond.

1210 BCE: The first ancient Egyptian references to the Sea People (Kadesh Inscriptions). The Philistines (called Peleset by the ancient Egyptians), now called the Palestinians, were one of the Sea Peoples. The ancient Egyptians settled the Philistines on the south coast of Canaan. Their homeland was called Philistia.

1209 BCE: The ancient Egyptians withdrew from Canaan. Among the many tribes living in the area were the Israelites and Philistines (as documented just above and below).

1206 BCE: The Merneptah Stele is the earliest reference to the Jews/Hebrews (called Ysrir in ancient Egyptian) being in the area now called Israel.



12th century BCE: Pottery of Philistine origin becomes common beyond Philistia across much of what is now called Israel. Some of the cities of Philistia include Ashdod, Ashkelon, Ekron, and

Gath. The Philistines are credited with introducing iron weapons, chariots, and new ways of fermenting wine to the local population.

1175 BCE: Philistia existed.

Historians and archaeologists agree that the northern Kingdom of Israel existed by ca. 900 BCE.

Historians and archaeologists agree that the Kingdom of Judah existed by ca. 850 BCE.

830 BCE: Philistia, Judah, and Israel all existed simultaneously.

711 BCE: King Sargon II of Assyria records in his annals conquering the Philistine city of Gath.

6th or 5th century BCE: Judaism evolved from Yahwism.

430 BCE: Herodotus mentioned Palestine five times in his *The Histories*.

330s BCE: Alexander the Great conquers the area. The area came under the rule of Ptolemy I Soter after Alexander's death. The Ptolemaic era was a time of peace and prosperity for Palestine, with trade and commerce flourishing in the most Hellenized areas.

285-247 BCE: The Hebrew Bible was translated into Greek at the Great Library of Alexandria, funded by Ptolemy II Philadelphus. By this time the Jewish community spoke Koine Greek and Aramaic and few Jews could even speak Hebrew and only a few Jewish scholars still knew how to read and write Hebrew. This translation was later called the Septuagint.

201 BCE: The Seleucids defeated the Ptolemies in 201 BCE. It took them until 198 BCE to gain complete control of Syria and Phoenicia.

167 BCE: During the Hasmonean period, Antiochus IV outlawed the practice of Judaism, including Sabbath observance, circumcision, and dietary laws, under the penalty of death. The Second Jewish Temple became a temple of Zeus.

164 BCE: Either Antiochus IV or his son Antiochus V rescinded the edict and allowed Jews to rededicate their temple, an event commemorated by Hanukkah.

140 BCE: Israel becomes independent under the rule of Simon, brother of Jonathan.

63 BCE: Roman general Pompey conquers Israel.

66 CE: Start of the Great Jewish Revolt, also called the First Jewish-Roman War.

70 CE: The Romans crushed the Great Jewish Revolt. The city of Jerusalem and the Second Temple were destroyed. Jews were banned from living anywhere near the site of the city's ruins.

130 CE: The city of Jerusalem is rebuilt. By this time Jews were a small minority of Palaestina.

4th century (Byzantine period): Constantine the Great converted to Christianity and Christian churches were built throughout Palestine, including the Church of the Holy Sepulchre in Jerusalem and the Church of the Nativity in Bethlehem. Some of the oldest still used Christian churches were built in this time period.

6th century (early Muslim period): Muslims conquered Palestine between 636 and 640. The protected people included the Christians, the Jews, and the Samaritans. The Muslims revoked the Roman ban on Jews living in Jerusalem.

1095-1291: The Crusader period, during which European Christians attempted to colonize Palestine.

1486: War broke out between the Mamluks and the Ottoman Turks.

1492: Sephardic Jews arrived in 1492 following their expulsion from Spain.

1516: The Ottoman Turks defeated the Mamluks at the Battle of Marj Dabiq and took control of Palestine.

undated: “After we become a strong force as the result of the creation of the state, we shall abolish partition and expand to the whole of Palestine.” —David Ben-Gurion

undated: “It’s not a matter of maintaining the status quo. We have to create a dynamic state, oriented towards expansion.” —Ben Gurion

undated: “There are some who believe that the non-Jewish population, even in a high percentage, within our borders will be more effectively under our surveillance; and there are some who believe the contrary, i.e., that it is easier to carry out surveillance over the activities of a neighbour than over those of a tenant. [I] tend to support the latter view and have an additional argument: ... the need to sustain the character of the state which will henceforth be Jewish ... with a non-Jewish minority limited to 15 percent. I had already reached this fundamental position as early as 1940 [and] it is entered in my diary.” —Joseph Weitz, head of the Jewish Agency’s Colonization Department. From *Israel: an Apartheid State* by Uri Davis, p.5

undated: “Let me extend Benny Morris’s logic (G2, October 3) in arguing that if the ethnic cleansing of the Palestinians in 1948 had been complete, there might have been peace today in the Middle East. If the Nazi programme for the final solution of the Jewish problem had been complete, for sure there would be peace today in Palestine.” —Professor Baruch Kimmerling, Hebrew University, Jerusalem

undated: “We must use terror, assassination, intimidation, land confiscation, and the cutting of all social services to rid the Galilee of its Arab population.” —Israel Koenig, “The Koenig Memorandum”

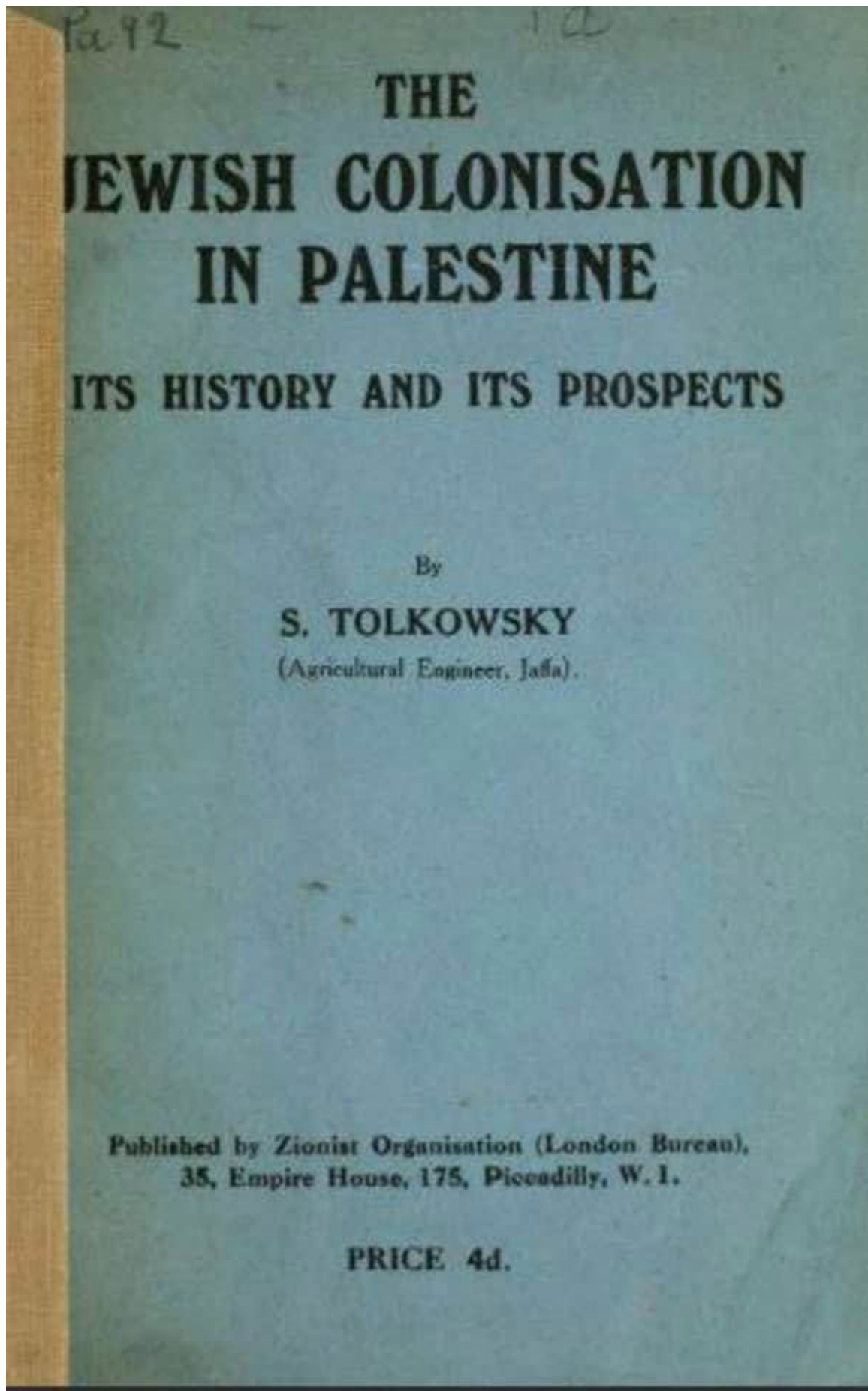
undated: “If I were an Arab leader, I would never sign an agreement with Israel. It is normal; we have taken their country. It is true God promised it to us, but how could that interest them? Our God is not theirs. There has been Anti - Semitism, the Nazis, Hitler, Auschwitz, but was that their fault? They see but one thing: we have come and we have stolen their country. Why would they accept that?” —David Ben-Gurion - Quoted by Nahum Goldmann in *Le Paraddoxe Juif* (*The Jewish Paradox*), pp121

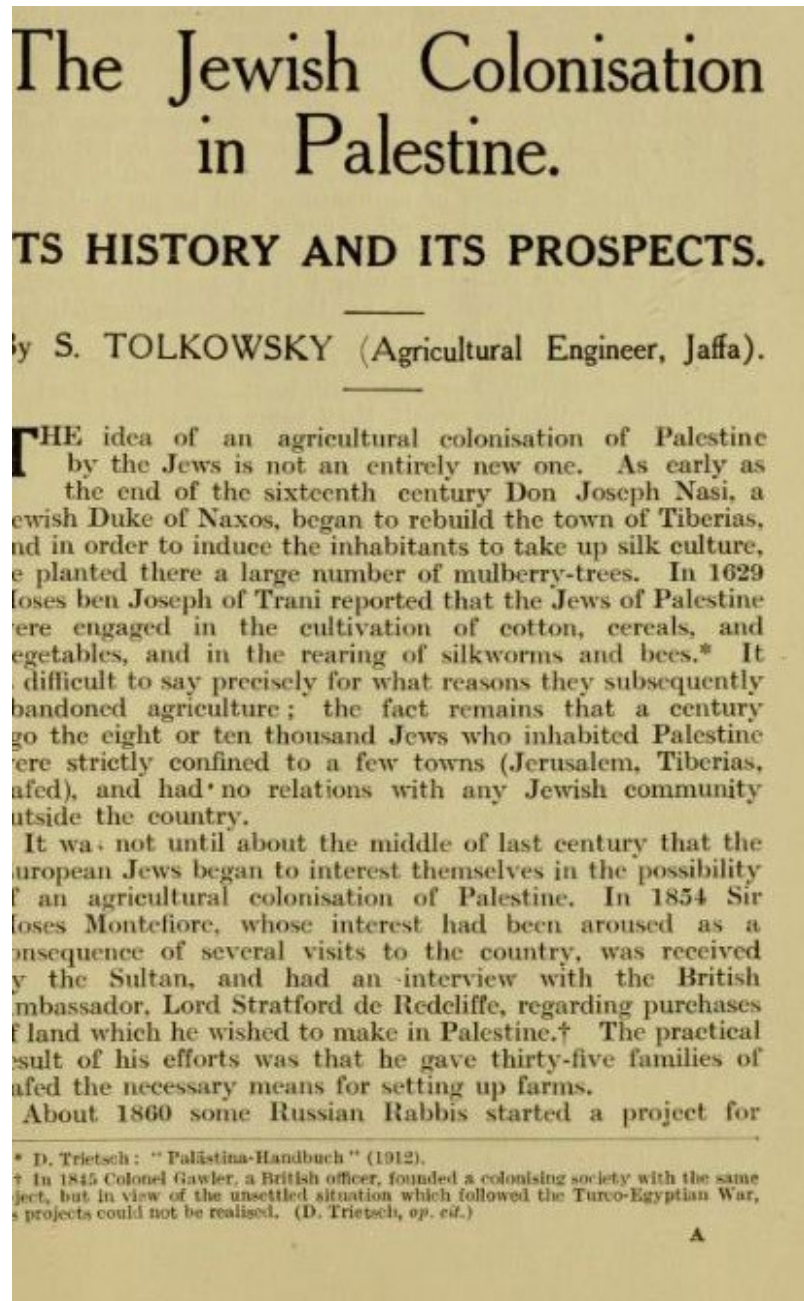
1885: “The term “Zionism” first coined by the Viennese writer, Nathan Birnbaum.” —[United Nations](#)

12 June 1895: “[Jewish colonists should] gently expropriate the native’s property and try to spirit the penniless population across the border by procuring employment for it in the transit countries while denying it any employment in our own country. The property owner will come over to our side. Both the process of expropriation and the removal of the poor must be carried out discreetly and circumspectly.” —Theodor Herzl, founder of the World Zionist Organization, who outlined the superiority of Jewish colonial rights over the rights of the indigenous Palestinians, written in *Complete Diaries*.

1896: “Theodor Herzl, founder of the Zionist movement, calls for restoration fo the “Jewish State”.” —[United Nations](#)

Herzl claimed that a proposed Jewish state in Palestine would be “an outpost of civilization as opposed to barbabrism” and described it as “something colonial” similar to the British colony in South Africa.





1896: Between 1896 and 1948, hundreds of thousands of Jews resettled from Europe to what was then British-controlled Palestine, including large numbers forced out of Europe during the Holocaust.

Many Arabs saw the influx of Jews as a European colonial movement, and the two peoples fought bitterly. The British couldn't control the violence — [Vox: European Jews arrived at Zionism partly because of rising anti-Semitic persecution](#)

1897: "First Zionist congress takes place in Basel, Switzerland and the first Zionist organization is founded." — [United Nations](#)

1907: "Zionist leader Chaim Weizmann visits Palestine." — [United Nations](#)

1908: "First Palestinian anti-Zionist weekly newspaper is published by Arab Christian Najib Nassar." — [United Nations](#)

1913: “Apart from the political danger, I can’t put up with the idea that our brethren are morally capable of behaving in such a way to humans of another people, and unwittingly the thought comes to my mind: if it is so now, what will be our relation to the others if in truth we shall achieve at the end of times power in Eretz Yisrael? And if this be the ‘Messiah’: I do not wish to see his coming.” —Ahad HaKI’am, Russian Jewish writer and philosopher, in a letter

1915: “British cabinet member Herbert Samuel calls for the Britihs annexation of Palestine in memorandum “[United Nations](#)

1916: “European Powers conclude secret Sykes=Picot agreement dividing future spheres of influence in Ottoman EMpire territories.” —[United Nations](#)

1917: “The [United Nations](#)

1919: “Emir Feisal presents a memorandum to the Paris Peace Conference, outlining the case for independence of Arab countries.” —[United Nations](#)

February 1919: Muslim and Christian Palestinians united to endorse unification of Palestine with Syria and oppose Zionism.

May 1919: Muslim and Christian Palestinians attended the Syrian National Congress in Damascus.

1920: The British administered Palestine on behalf of the League of Nations from 1920 to 1948. The British Mandate was formerly approved by the League of Nations in 1922.

April 1920: The Allied Supreme Council (the United States, Great Britain, France, Italy, and Japan) met at Sanremo and gave Palestine to the British and Syria to the French over the objections of the Muslims and Christians living in the area.

4-7 April 1920: Muslims and Jews clashed in Jerusalem in the 1920 Nebu Musa riots.

1922: The 1922 census counted the population of Palestine at 763,550, of which 89% were Palestinians (called Arabs) and 11% were Jews.

1922: “The League of Nations grants [United Nations](#)

1923: Ukrainian Zionist Ze’ev Jabotinsky wrote in the *Iron Wall* essay (written in Russian) in response to British Colonial Secretary Winston Churchill prohibiting Zionist settlement on the east bank of the Jordan River: “We are seeking to colonise a country against the wishes of its population, in other words, by force. ... either Zionism is moral and just or it is immoral and unjust. But that is a question that we should have settled before we became Zionists. Actually, we have settled that question, and in the affirmative. Zionism is moral and just. ... The soil does not belong to those who possess land in excess but to those who do not possess any. It is an act of simple justice to alienate part of their land from those nations who are numbered among the great

landowners of the world, in order to provide a place of refuge for a homeless, wandering people. And if such a big landowning nation resists, which is perfectly natural, it must be made to comply by compulsion.”

1923: “Zionist colonization, even the most restricted, must either be terminated or carried out in defiance of the will of the native population ... If you wish to colonize a land in which people are already living, you must provide a garrison for the land, or find a benefactor who will maintain the garrison on your behalf.” —Ze’ev Janotinsky, political head of the the paramilitary Irgun Zvai Leumi and founder of the right-wing Revisionist Zionists and its Betar Youth Movement

1924: “The national autonomy which we demand for ourselves we demand for the Arabs as well. But we do not admit their right to rule over the country to the extent that the country is not built up by them and still awaits those who will work it [meaning European Jewish colonists].” —Ben Gurion

1925: “Zionism is a colonizing adventure and, therefore, it stands or falls on the question of armed forces.” —Ze’ev Janotinsky, political head of the the paramilitary Irgun Zvai Leumi and founder of the right-wing Revisionist Zionists and its Betar Youth Movement

1930: “The rights that the Jewish people has been adjudged in Palestine [by the League of Nations Mandate] do not depend on the consent, and cannot be subject to the will, of the majority of its present inhabitants.” —Chaim Weizmann, Belorussina head of the Zionist Organisation, opposing Palestinian self-determination, adding Palestinians can not “be considered as owning the country in the sense in which the inhabitants of Iraq or of Egypt possess their respective countries.”

1933: “Palestinians riot amid sudden rise in Jewish immigration from Nazi persecution in Germany.” —[United Nations](#)

25 August 1933: The Haavara Agreement was signed between Nazi Germany and Zionist German Jews. The agreement came after three months of talks between the Zionist Federation of Germany, the Anglo-Palestine Bank, and economic authorities of Nazi Germany. Between 1933 and 1939, approximately 60,000 German Jews migrated to Palestine.

10 August 1934: “...New York Times in 1934...” —[asdf](#)

The New York Times

FRIDAY, AUGUST 10, 1934

Settlers Off for Palestine.

A group of sixty pioneer settlers, including ten representatives of the Jewish National Workers Alliance, sailed for Poland en route to Palestine yesterday on the Gdynia-America Line steamer Pulaski. The Alliance representatives will stop in Poland to study methods of training young pioneers. The fifty others are prospective settlers.

1936: "We and they [the Palestinians] want the same thing: we both want Palestine. And that is the fundamental conflict." —David Ben-Gurion

1936-1939: "Palestinian rebellion against the British Mandate and Jewish immigration."
—[United Nations](#)

1937: "A partial Jewish State is not the end, but only the beginning. I am certain that we can not be prevented from settling in the other parts of the country and the region." —David Ben-Gurion, letter to his son

1937: "The Arabs will need to go, but one needs an opportune moment for making it happen, such as a war." —David Ben-Gurion, letter to his son

1937: "We will expel the Arabs and take their place. In each attack a decisive blow should be struck resulting in the destruction of homes and the expulsion of the population." —David Ben-

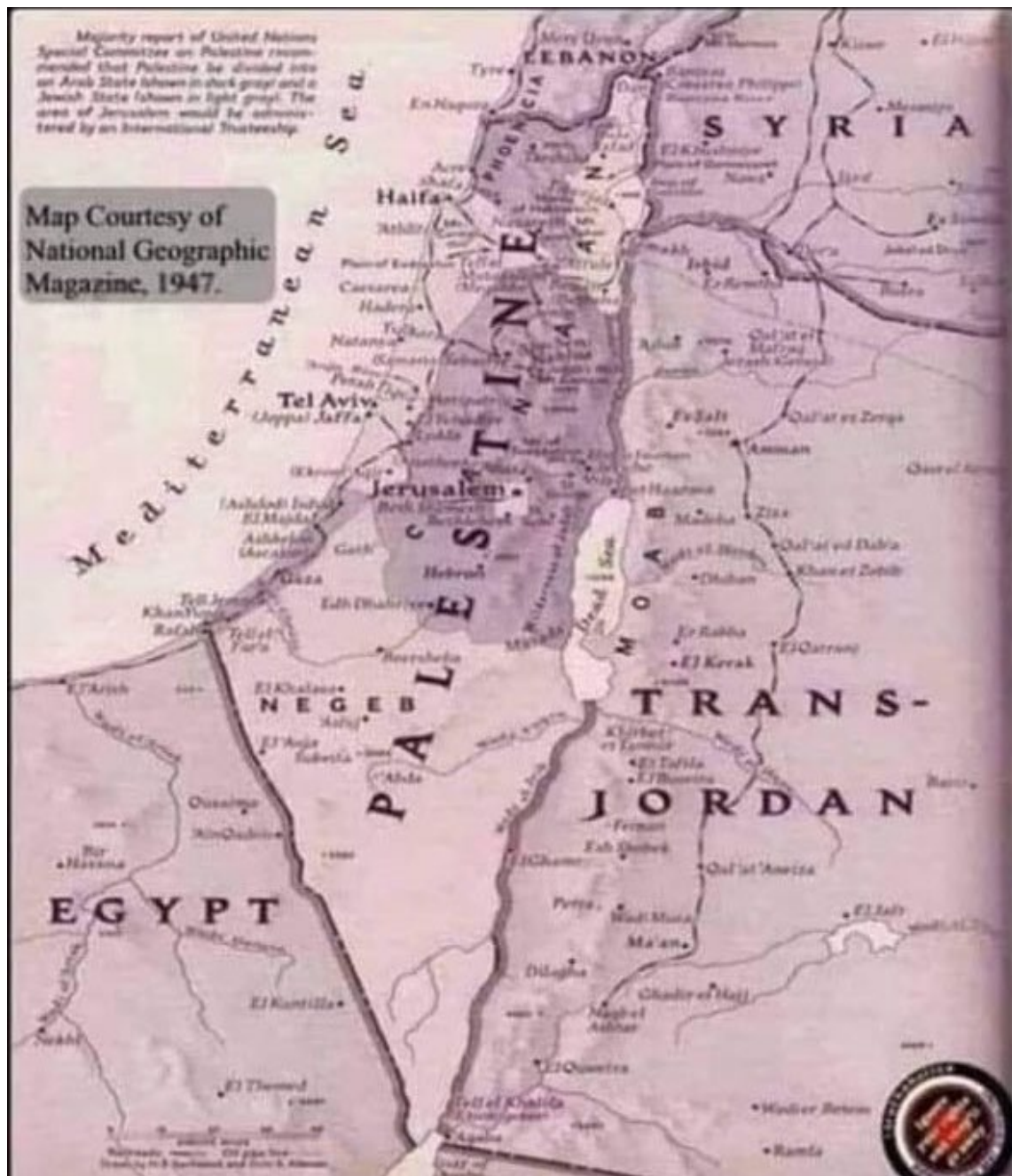
Gurion, letter to his son

1938: “Let us not ignore the truth among ourselves...politically we are the aggressors and they defend themselves ... The country is theirs, because they inhabit it, whereas we want to come here and settle down, and in their view we want to take away from them their country.” — Speech by David Ben-Gurion, quoted in *Zionism and the Palestinians* by Simha Flapan, 1979

1940: “Between ourselves it must be clear that there is no room for both people in this country...there is no other way than to transfer the Arabs to the neighbouring countries, to transfer all of them; not one village, not one tribe should be left.” —Yosef Weitz of the Jewish National Fund, diary entry

22 July 1946: “On July 22, 1946, the southwestern corner of the hotel was bombed during an attack led by the Zionist paramilitary group Irgun. 91 people died and 45 people were injured. An earlier attempt by the Irgun to attack the hotel had been foiled when the Haganah learned of it, and warned the British authorities.” —[Wikipedia](#)

1947: “This map was issued by National Geographic in 1947, one year before Nakba, there was no such thing called “Israel”. ” —[Dr. Anastasia Maria Loupis](#)



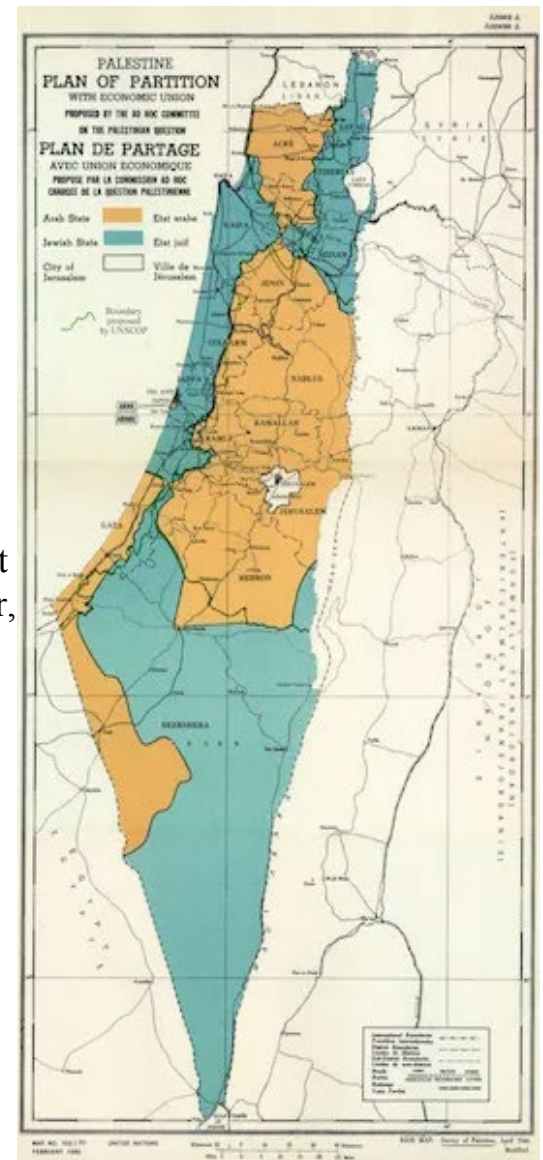
1947: “The Promised Land extends from the River of Egypt to the Euphrates. It includes parts of Syria and Lebanon.” —Rabbi Fischmann, member of the Jewish Agency for Palestine, in his testimony to the U.N. Special Committee of Enquiry

1947: The United Nations voted to split the land into two countries. Almost all of the roughly 650,000 Jews went to the blue territory in the map to the right, and a majority of the Arab population (roughly twice the size of the Jewish community) went to the orange.

The Jewish residents accepted the deal. The Palestinians, who saw the plan as an extension of a long-running Jewish attempt push them out of the land, fought it. The Arab states of Egypt, Jordan, Iraq, and Syria all later declared war on

Israel, as well (albeit not to defend the Palestinians).

Israeli forces defeated the Palestinian militias and Arab armies in a vicious conflict that turned 700,000 Palestinian civilians into refugees. The UN partition promised 56 percent of British Palestine for the Jewish state; by the end of the war, Israel possessed 77 percent — everything except the West Bank and the eastern quarter of Jerusalem (controlled by Jordan), as well as the Gaza Strip (controlled by Egypt). It left Israelis with a state, but not Palestinians. —[Vox: European Jews arrived at Zionism partly because of rising anti-Semitic persecution](#)



29 November 1947: “**UN Partition Plan of Palestine** The UN General Assembly (UNGA) passes Resolution 181 calling for the partition of Palestine into two states, one Jewish and one Arab. The resolution also envisions an international, UN-run body to administer Jerusalem. Palestine had been under the military and administrative control of the United Kingdom (known as a mandate) since the 1917 defeat of the Ottoman Empire in World War I. Civil strife and violence between the Jewish and Arab communities of Palestine intensifies.” —[Council on Foreign Relations](#)

29 November 1947: The United Nations adopted Resolution 181 (also known as the Partition Resolution) that would divide Great Britain's former Palestinian mandate into Jewish and Arab states in May 1948 when the British mandate was scheduled to end.

1948: “There are a few hundred thousand Negroes but that is a matter of no significance.” — British authorities to Chaim Weizman on the subject of the Palestinians

May 1948: “We should prepare to go over to the offensive. Our aim is to smash Lebanon, Trans-Jordan, and Syria. The weak point is Lebanon, for the Moslem regime is artificial and easy

for us to undermine. We shall establish a Christian state there, and then we will smash the Arab Legion, eliminate Trans-Jordan; Syria will fall to us. We then bomb and move on and take Port Said, Alexandria and Sinai.” —David Ben-Gurion, May 1948, to the General Staff

14 May 1948: “**Israel declares independence** Israel declares its independence as the British rule comes to an end. Sparked by Israel’s declaration of independence, the first Arab-Israeli war begins. Egypt (supported by Saudi Arabian, Sudanese, and Yemeni troops), Iraq, Jordan, Lebanon, and Syria invade Israel. The fighting continues until 1949, when Egypt, Israel, Jordan, Lebanon, and Syria sign armistice agreements.” —[Council on Foreign Relations](#)

14 May 1948: The United States was the first nation to recognize Israel as an independent state. Israel proclaimed its independence at midnight 14 May 1948. 11 minutes later US President Harry Truman issued a statement of recognition.

15 June 1948: “The most spectacular event in the contemporary history of Palestine - more spectacular in a sense than the creation of the Jewish state - is the wholesale evacuation of its Arab population which has swept with it also thousands of Arabs from areas threatened and/or occupied by us outside our boundaries.” —Moshe Shertok-latter Israeli Foreign Min-in a letter to Goldmann

18 July 1948: “We must do everything to ensure they [the Palestinians] never do return. [Assuring his fellow Zionists that Palestinians will never come back to their homes.] The old will die and the young will forget.” —David Ben-Gurion, in his diary, quoted in Michael Bar Zohar’s *Ben-Gurion: the Armed Prophet*, Prentice-Hall, 1967, p. 157

1948: “HAMAS formed in 1987, 4 decades after this photo was taken:” —[Stephanie Voltolin](#)



Palestinians fleeing for their lives from Israeli soldiers and settlers, 1948

11 December 1948: “**UN addresses Palestinian displacement** Over the course of the Arab-Israeli war, at least seven hundred thousand Palestinian refugees flee their homes in an exodus known to Palestinians as the Nakba, or catastrophe. Israel wins the war, retaining the territory provided to it by the United Nations and capturing some of the areas designated for the Palestinian state. Israel gains control of West Jerusalem, Egypt gains the Gaza Strip, and Jordan gains the West Bank and East Jerusalem, including the Old City and its historic Jewish quarter. In 1948, the UN General Assembly (UNGA) passes Resolution 194, which calls for the repatriation of Palestinian refugees. Palestinians will later point to Resolution 194 as having established a “right of return” for Palestinian refugees and their descendants. The specific parameters of this return are debated in the decades that follow, including among the large number of descendants from the 1948 refugees and the three hundred thousand Palestinians who will flee their homes during the June 1967 war.” — [Council on Foreign Relations](#)

14 October 1953: “The Qibya massacre occurred during Operation Shoshana, a reprisal operation that occurred in October 1953 when Israeli troops under Ariel Sharon attacked the village of Qibya in the West Bank, which was then under Jordan's control, and killed Palestinian civilians.

Israeli forces massacred more than sixty-nine Palestinian villagers, two thirds of which were women and children. Forty-five houses, a school, and a mosque were destroyed. The attack

followed cross-border raids from the West Bank and Israel framed the Qibya massacre as a response to the Yehud attack in which an Israeli woman and her two children were killed.

The act was condemned by the U.S. State Department, the UN Security Council, and by Jewish communities worldwide. The State Department described the raid as “shocking”, and used the occasion to confirm publicly that economic aid to Israel had been suspended previously, for other non-compliance regarding the 1949 Armistice Agreements.” —[Wikipedia](#)

31 August 1955: “During the night of 31 August 1955, three Israeli paratroop companies attacked the British-built Tegart fort in Khan Yunis from where attacks had been carried out against Israelis. The police station, a petrol station and several buildings in the village of Abasan were destroyed, as well as railway tracks and telegraph poles. In heavy fighting, 72 Egyptian soldiers were killed. One Israeli soldier was killed and 17 were wounded. The operation led to a ceasefire on September 4, forcing President Gamal Abdel Nasser and the Egyptian government to halt Palestinian fedayeen operations against Israel. One of the mechanized companies was commanded by Rafael Eitan.” —[Wikipedia](#)

1956: “I don’t know something called International Principles. I vow that I’ll burn every Palestinian child (that) will be born in this area. The Palestinian woman and child is more dangerous than the man, because the Palestinian child’s existence infers that generations will go on, but the man causes limited danger.” —Ariel Sharon, In an interview with General Ouze Merham

1956: “I vow that if I was just an Israeli civilian and I met a Palestinian I would burn him and I would make him suffer before killing him. With one hit I’ve killed 750 Palestinians (in Rafah in 1956). I wanted to encourage my soldiers by raping Arabic girls as the Palestinian women is a slave for Jews, and we do whatever we want to her and nobody tells us what we shall do but we tell others what they shall do.” —Ariel Sharon, In an interview with General Ouze Merham

1960: “We shall reduce the Arab population to a community of woodcutters and waiters.” —Rabin’s description of the conquest of Lydda, after the completion of Plan Dalet - Uri Lubrani, PM Ben-Gurion’s special adviser on Arab Affairs, 1960. From “The Arabs in Israel” by Sabri Jiryas

5 June 1967 - 10 June 1967: “**The Six Day War** Israel and several of its Arab neighbors fight the Six Day War. Israel wins a decisive victory: it suffers seven hundred casualties; its adversaries suffer nearly twenty thousand. Israel emerges with control of the West Bank and the Gaza Strip—areas inhabited primarily by Palestinians—as well as all of East Jerusalem. Israel also takes control of Syria’s Golan Heights and the Sinai Peninsula, which is part of Egypt. Israel will stay in the Sinai Peninsula until April 1982.” —[Council on Foreign Relations](#)

27 June 1967: The Israeli army illegally occupied East Jerusalem, part of Palestine.

4 July 1967: “The term annexation is out of place. The measures adopted relate to the integration of Jerusalem in the administrative spheres and furnish a legal basis for the basis for the protection of the Holy Places in Jerusalem.” —Israeli Foreign Minister Abba Eban at the

United Nations Assembly

22 November 1967: “**UN Security Council resolution calls for Israeli withdrawal** The UN Security Council (UNSC) passes Resolution 242. It calls for Israeli “withdrawal ... from territories occupied in the recent conflict” and for the termination of “states of belligerency and respect for and acknowledgement of the sovereignty, territorial integrity, and political independence of every state in the area and the right to live in peace within secure and recognized boundaries.” The resolution establishes the concept of land for peace.” —[Council on Foreign Relations](#)

8 March 1969: “How can we return the occupied territories? There is nobody to return them to.” —Golda Meir

4 April 1969: “Jewish villages were built in the place of Arab villages. You do not even know the names of these Arab villages, and I do not blame you because geography books no longer exist. Not only do the books not exist, the Arab villages are not there either. Nahlal arose in the place of Mahlul; Kibbutz Gvat in the place of Jibta; Kibbutz Sarid in the place of Huneifis; and Kefar Yehushua in the place of Tal al-Shuman. There is not a single place built in this country that did not have a former Arab population.” —Moshe Dayan, address to the Technion, Haifa, reported in *Haaretz*

15 June 1969: “It was not as though there was a Palestinian people and we came and threw them out and took their country from them. They did not exist. There was no such thing as Palestinians, they never existed.” —Israeli Prime Minister Golda Meir (born in Ukraine)

1972: “Israeli self-determination should take moral and historical precedence over Palestinian self-determination, though it does not rule it out entirely.” —Israeli Foreign Minister Abba Eban (born in South Africa)

19 March 1972: “The thesis that the danger of genocide was hanging over us in June 1967 and that Israel was fighting for its physical existence is only a bluff, which was born and developed after the war.” —Israeli General Matityahu Peled, *Ha'aretz*

14 July 1972: “It is the duty of Israeli leaders to explain to public opinion, clearly and courageously, a certain number of facts that are forgotten with time. The first of these is that there is no Zionism, colonization or Jewish State without the eviction of the Arabs and the expropriation of their lands.” —Yoram Bar Porath, *Yediot Aahronot*

3 October 1973: “**The Yom Kippur War** Another Arab-Israeli war, known variously as the Yom Kippur War, the Ramadan War, and the October War, is fought when Egypt and Syria attempt to retake the Israeli-occupied Sinai Peninsula and Golan Heights. Cold War tensions spike as the Soviet Union aids Egypt and Syria and the United States aids Israel. The Organization of the Petroleum Exporting Countries (OPEC) begins an oil embargo on countries that support Israel, and the price of oil skyrockets. The fighting ends after a UN-sponsored cease-fire (negotiated by the United States and the Soviet Union) takes hold. The UNSC passes

Resolution 338, which calls for implementing UNSC Resolution 242.” —[Council on Foreign Relations](#)

1977: Likud Party Original Charter

“The Right of the Jewish People to the Land of Israel (Eretz Israel)

a. The right of the Jewish people to the land of Israel is eternal and indisputable and is linked with the right to security and peace; therefore, Judea and Samaria will not be handed to any foreign administration; between the Sea and the Jordan there will only be Israeli sovereignty.

b. A plan which relinquishes parts of western Eretz Israel, undermines our right to the country, unavoidably leads to the establishment of a “Palestinian State,” jeopardizes the security of the Jewish population, endangers the existence of the State of Israel. and frustrates any prospect of peace.

Genuine Peace-Our Central Objective

a. The Likud government will place its aspirations for peace at the top of its priorities and will spare no effort to promote peace. The Likud will act as a genuine partner at peace treaty negotiations with our neighbors, as is customary among the nations. The Likud government will attend the Geneva Conference. .

b. The Likud governments peace initiative will be positive. Directly or through a friendly state. Israel will invite her neighbors to hold direct negotiations, in order to sign without pre-conditions on either side and without any solution formula invented by outsiders (invented outside).

At the negotiations each party will be free to make any proposals it deems fit.

Settlement

Settlement. both urban and rural. in all parts of the Land of Israel is the focal point of the Zionist effort to redeem the country, to maintain vital security areas and serves as a reservoir of strength and inspiration for the renewal of the pioneering spirit. The Likud government will call on the younger generation in Israel and the dispersions to settle and help every group and individual in the task of inhabiting and cultivating the wasteland, while taking care not to dispossess anyone.

Arab Terror Organizations

The PLO is no national liberation organization but an organization of assassins, which the Arab countries use as a political and military tool, while also serving the interests of Soviet imperialism, to stir up the area. Its aim is to liquidate the State of Israel, set up an Arab country instead and make the Land of Israel part of the Arab world. The Likud government will strive to eliminate these murderous organizations in order to prevent them from carrying out their bloody deeds.” —[Likud Party Original Charter](#)

1 September 1978: “**The Camp David Accords** Israel and Egypt sign the Camp David Accords, which establish a basis for a peace treaty between the two countries. The accords also commit the Israeli and Egyptian governments, along with other parties, to negotiate the disposition of the West Bank and the Gaza Strip.” —[Council on Foreign Relations](#)

26 March 1979: “**Israel withdraws from the Sinai Peninsula** Egypt and Israel sign a peace treaty, the first between Israel and one of its Arab neighbors. The treaty commits Israel to withdraw from the Sinai Peninsula and evacuate its settlements there. The termination of the state of war between Egypt and Israel leads to the normalization of diplomatic and commercial relations between the two countries. Israel’s prime minister and Egypt’s president exchange letters reaffirming their commitment—outlined in the Camp David Accords—to negotiate the disposition of the West Bank and the Gaza Strip.” —[Council on Foreign Relations](#)

23 October 1979: “We walked outside, Ben-Gurion accompanying us. Allon repeated his question, ‘What is to be done with the Palestinian population?’ Ben-Gurion waved his hand in a gesture which said ‘Drive them out!’ ” —Yitzhak Rabin, leaked censored version of Rabin memoirs, published in the *New York Times*

1982: “In 1982 Haig lost Reagan’s confidence when he assured him that the ongoing Israeli invasion of Lebanon was limited to securing a safe zone in the southern part of the country. By June, Israeli troops under Ariel Sharon’s leadership had reached Beirut. Reagan accepted Haig’s resignation on June 25, 1982, confiding in his diary that “this has been a heavy load.”

Schultz, the new secretary of state, inherited a tumultuous situation. Reagan, who had considered Israel a trustworthy ally, was disgusted with that was happening in Lebanon. Israel’s 10-week siege culminated with its planes bombing West Beirut for 11 consecutive hours on Aug. 12. At Deaver’s suggestion, Reagan called Israeli prime minister Menachem Begin. “Menachen, this is a holocaust,” Reagan said.

“Mr. President, I think I know what a holocaust is,” Begin replied in a sarcastic voice.

Reagan refused to give ground, bluntly telling Begin he had to stop the bombing. Twenty minutes later Begin called back, saying he had ordered Sharon to halt the attacks. Reagan thanked him, hung up and said to Deaver, “I didn’t know I had that kind of power.” ” —[Not voting for genocide Joe](#)

25 June 1982: “The Palestinians are beasts walking on two legs.” —Menahim Begin, speech to the Knesset, quoted by Amnon Kapeliouk, “Begin and the Beasts” in *New Statesman*

July 1982: “In July 1982, the White House halted shipments of cluster munitions to Israel, declaring that the Israelis had violated arms agreements not to use these weapons on civilian areas. After a particularly deadly IDF barrage launched during the seige of Beirut, Reagan called Begin and demanded the IDF stop the shelling. To do so, he used deeply emotional terms. “Here, on our television, night after night, our people are being shown the symbols of this war, and is it a holocaust,” Reagan said.” —Sarah E. Parkison, *Foreign Affairs* [“The Ghosts of Lebanon”](#) [behind paywall]

18 September 1982: “The Sabra and Shatila massacre was the slaughter of between 762 and 3,500 civilians, mostly Palestinians and Lebanese Shiites, by the Hobeika-led militia and the IDF in the Sabra neighborhood of southern Beirut and the nearby Shatila refugee camp from approximately 6:00 pm on 16 September to 8:00 am on 18 September 1982.

Shatila was set up by the International Committee of the Red Cross to accommodate hundreds

of refugees who came there after 1948. They were from villages around the area of Amka, Majd al-Krum and Yajur in northern Palestine.” —[Wikipedia](#)

17 December 1982: “I don’t mind if after the job is done you put me in front of a Nuremberg Trial and then jail me for life. Hang me if you want, as a war criminal. What you don’t understand is that the dirty work of Zionism is not finished yet, far from it.” —Ariel Sharon to Amos Oz, editor of *Davar*

April 1983: “In April 1983, he [Reagan] told the public his administration had halted F-16 sales to Israel until the state withdrew from Lebanon.” —Sarah E. Parkison, *Foreign Affairs* [“The Ghosts of Lebanon”](#) [behind paywall]

14 April 1983: “When we have settled the land, all the Arabs will be able to do about it will be to scurry around like drugged cockroaches in a bottle.” —Rafael Eitan, Chief of Staff of the Israeli Defence Forces, *New York Times*

13 April 1983: “We declare openly that the Arabs have no right to settle on even one centimetre of Eretz Israel ... Force is all they do or ever will understand. We shall use the ultimate force until the Palestinians come crawling to us on all fours.” —Rafael Eitan, Chief of Staff of the Israeli Defence Forces, as reported by Gad Becker, *Yediot Ahronot* 14 April 1983, *New York Times*

October 1983: “We have to kill all the Palestinians unless they are resigned to live here as slaves.” —Chairman Heilbrun of the Committee for the Re-election of General Shlomo Lahat, the mayor of Tel Aviv

August 1984: “Three myths propel U.S. policy in the Middle East: The belief that Saudi Arabia can be a broker for peace, the belief that King Hussein (of Jordan) is ready to negotiate peace, and the belief that the Palestine Liberation Organization can deliver a consensus for peace.” —Senator Joe Biden at the 1984 annual conference of Herut Zionists of America (Herut is the forerunner of Israel’s Likud Party)

1 December 1987: “**First Palestinina Intifada** An Israeli driver kills four Palestinians in a car accident that sparks the first Palestinian intifada, or uprising, against Israeli occupation in the West Bank and Gaza. The image of Palestinians throwing rocks at Israeli tanks becomes the enduring image of the intifada. Over the next six years, roughly two hundred Israelis and 1,300 Palestinians are killed.”

A Palestinian cleric named Sheikh Ahmed Yassin establishes the militant group Hamas as an offshoot of the Muslim Brotherhood. Hamas endorses jihad as a way to regain territory for Muslims; the United States designates Hamas a foreign terrorist organization in 1997.” —[Council on Foreign Relations](#)

August 1984: “Three myths propel U.S. policy in the Middle East: The belief that Saudi Arabia can be a broker for peace, the belief that King Hussein (of Jordan) is ready to negotiate peace, and the belief that the Palestine Liberation Organization can deliver a consensus for

peace.” —Senator Joe Biden at the 1984 annual conference of Herut Zionists of America (Herut is the forerunner of Israel's Likud Party)

1988: “We don't hate Jews and fight Jews because they are Jewish. They are a people of faith and we are a people of faith, and we love all people of faith. If my brother, from my own mother and father and my own faith takes my homes and expels me from it, I will fight him. I will fight my cousin if he takes my home and expels me from it. So when a Jew takes my home and expels me from it, I will fight him. I don't fight other countries because I want to be at peace with them, I love all people and wish peace for them, even the Jews. The Jews lived with us all of our lives and we never assaulted them, and they held high positions in government and ministries. But if they take my home and make me a refugee like 4 million Palestinians in exile? Who has more right to this land? The Russian immigrant who left this land 2000 years ago or the one who left 40 years ago? We don't hate the Jews, we only ask for them to give us our rights.” —Sheikh Ahmed Ismail Hassan Yassin, founder of Hamas

31 July 1988: “**Jordan surrenders claims on the West Bank and East Jerusalem** King Hussein of Jordan relinquishes his country's claims to the West Bank and East Jerusalem in favor of the PLO's claims. In December of the same year, Palestine Liberation Organization (PLO) Chairman Yasir Arafat denounces violence, recognizes Israel's right to exist, and acknowledges United Nations Security Council (UNSC) Resolution 242 and the concept of land for peace. The United States responds to Arafat's announcement by beginning direct talks with him, though it suspends the talks following a Palestinian terrorist attack against Israel.” —[Council on Foreign Relations](#)

30 October 1991: “**The Madrid Peace Conference** The Madrid Peace Conference begins, sponsored jointly by the United States and the Soviet Union. Israeli, Jordanian, Lebanese, Palestinian, and Syrian delegates attend the first negotiations among these parties. The talks proceed along bilateral tracks between Israel and its neighbors, though the Lebanese join the Syrian delegation and the Jordanian team includes Palestinian representatives. A multilateral track includes the wider Arab world and addresses regional issues. The talks last for two years without any breakthroughs.” —[Council on Foreign Relations](#)

13 September 1993: “**The Oslo Accords** Secret negotiations in Norway result in the Declaration of Principles on Interim Self-Government Arrangements, also known as the Oslo Accords. Before the accords are signed, Israel and the PLO recognize each other in an exchange of letters. Israel and the PLO agree to the creation of the Palestinian Authority to temporarily administer the Gaza Strip and West Bank. Israel also agrees to begin withdrawing from parts of the West Bank, though large swathes of land and Israeli settlements remain under the Israeli military's exclusive control. The Oslo Accords envision a peace agreement by 1999. Palestinian leader Yasir Arafat, Israeli Prime Minister Yitzhak Rabin, and Israeli Foreign Minister Shimon Peres win the Nobel Peace Prize in 1994 for their efforts on the Oslo Accords.” —[Council on Foreign Relations](#)

1994: Hamas announces it will sign a truce with Israel is Israel agrees to withdraw to the 1967

borders, pay reparations, allow free elections in the territories, and give Palestinian refugees the right to return.

4 May 1994: “**The Gaza-Jericho Agreement** Israel and the Palestinians sign the Gaza-Jericho Agreement, which begins implementation of the Oslo Accords. The agreement provides for an Israeli military withdrawal from Gaza and Jericho, a town in the West Bank, and for a transfer of authority from Israeli administration to the newly formed Palestinian Authority. The agreement also establishes the structure and composition of the Palestinian Authority, its jurisdiction and legislative powers, a Palestinian police force, and relations between Israel and the Palestinian Authority. Yasir Arafat returns to the Gaza Strip after a long absence.” —[Council on Foreign Relations](#)

26 October 1994: “**Israel and Jordan sign peace treaty** Israel and Jordan sign a peace treaty, settling their territorial dispute and agreeing to future cooperation in sectors such as trade and tourism. This is Israel’s second peace treaty with an Arab state. The treaty accords special administrative responsibilities for Jerusalem’s Muslim holy places to Jordan.” —[Council on Foreign Relations](#)

21 August 1995: “We did not know what to do with them [surrendered Egyptian POWs in 1956]. There was no choice but to kill them. This is not such a big deal if you take into consideration that I slept well after having escaped the crematories of Auschwitz.” —Retired Israeli brigadier general Ariele Eliazar, *The New York Times*

28 September 1995: “**Oslo II Accord** Israeli and Palestinian negotiators sign the Interim Agreement, sometimes called Oslo II. It gives Palestinians control over additional areas of the West Bank and defines the security, electoral, public administration, and economic arrangements that will govern these areas until a final peace agreement is reached in 1999.” —[Council on Foreign Relations](#)

8 May 1998: “The Oslo agreement is very important for the Palestinians since it is the only official agreed-upon document they got. We have another document, a much older one ... the Bible.” —Ariel Sharon, speaking at a Washington symposium

15 November 1998: “Everybody has to move, run and grab as many hilltops as they can to enlarge the settlements because everything we take now will stay ours... Everything we don't grab will go to them.” —Israeli Foreign Minister Ariel Sharon, addressing the Tsomet Party, according to the *Agence France Presse*

2000: “Jordan is a part from Eretz Israel in history.” —Israel Prime Minister Ariel Sharon

11 July 2000 - 25 July 2000: “**Camp David Summit** President Bill Clinton hosts Israeli and Palestinian leaders for talks at Camp David. Reports indicate that Israeli Prime Minister Ehud Barak is prepared to accept, among other things, Palestinian sovereignty over some 91 percent of the West Bank and certain parts of Jerusalem. The deal would include a land swap in which some Israeli land would go to the Palestinians in compensation for the remaining 9 percent of the West

Bank, which would go to Israel. Two weeks of intensive discussion, however, fails to produce an agreement. President Clinton blames Arafat for the failure. Before leaving office several months later, Clinton lays out proposals for both sides. Talks between them continue, but without success.” —[Council on Foreign Relations](#)

28 August 2000: “The Palestinians are like crocodiles, the more you give them meat, they want more.” —Israel Prime Minister Ehud Barak, reported by the *Jerusalem Post* 30 August 2000

28 September 2000: “**The Second Palestinian Intifada** Israeli politicians, including Ariel Sharon, a controversial retired Israeli general, visit the Temple Mount/Haram al-Sharif. Palestinians view the visit as an effort to change the status quo at the holy site. The ensuing demonstrations turn violent, marking the beginning of a second intifada. It will last until 2005 and be markedly more violent than the first intifada. Four thousand Palestinians and one thousand Israelis die.” —[Council on Foreign Relations](#)

9 November 2023: “This is the famous picture of Faris Odeh, a fifteen-year-old Gazan boy killed Nov. 9, 2000, ten days after this photo. According to the *New York Times*, “His friends said he was shot while crouching down to pick up a stone. He was so close to an Israeli tank, they said, that they could not drag his still body to an ambulance for more than an hour. The hospital pronounced him dead on arrival.” Does this picture make you uncomfortable? Do you think I should not show it? It makes me cry each time I see it, not because I am sad for his death, but because I cannot fathom the courage he had. I know of no culture, no religion, that would not praise him as a martyr (a Greek loanword into English meaning literally the same thing as shaheed: witness). If you have a problem with this photo, I urge you to ask yourself why.” —[Jonathan AC Brown](#) on 6 December 2023



2001: “[The way to deal with Palestinians is to] beat them up, not once but repeatedly, beat them up so it hurts so badly, until it’s unbearable.” —Benjamin Netanyahu



**Israeli Prime Minister
Benjamin Netanyahu's
approach to Palestinians:**
“beat them up, not once
but repeatedly, beat them up so
it hurts so badly, **until it's
unbearable.”**

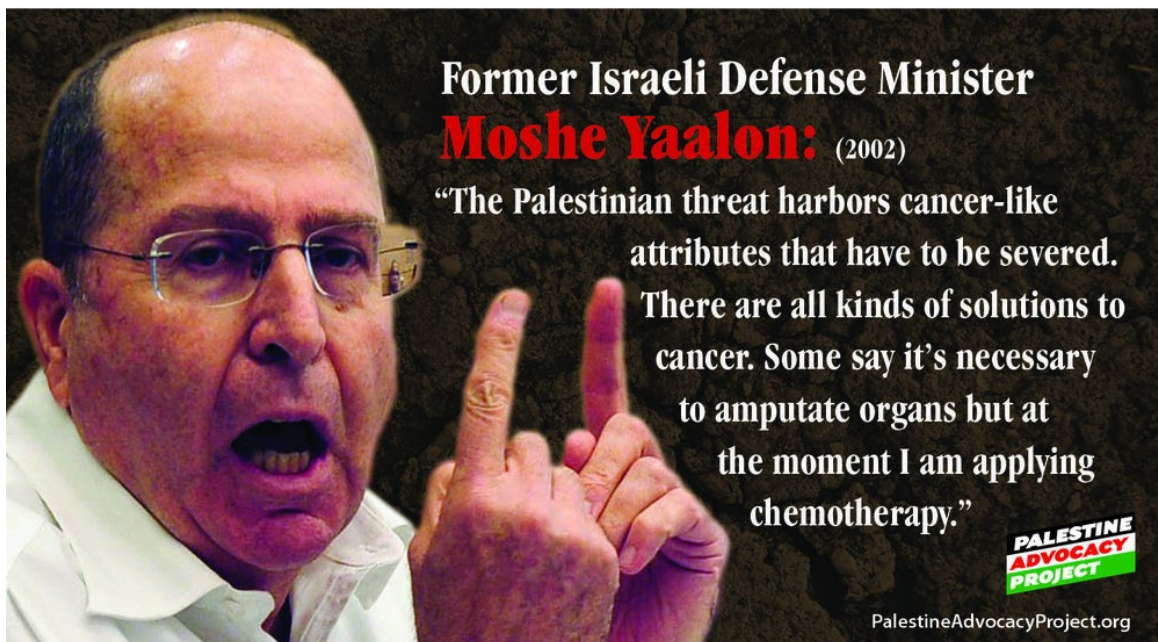
PalestineAdvocacyProject.org



3 October 2001: “Every time we do something you tell me America will do this and will do that. ... I want to tell you something very clear: Don’t worry about American pressure on Israel. We, the Jewish people, control America, and the Americans know it.” —Israeli Prime Minister Ariel Sharon, to Shimon Peres, as reported on Kol Yisrael radio

10 May 2001: “There is a huge gap between us [Jews] and our enemies -not just in ability but in morality, culture, sanctity of life, and conscience. They are our neighbours here, but it seems as if at a distance of a few hundred meters away, there are people who do not belong to our continent, to our world, but actually belong to a different galaxy.” —Israeli president Moshe Katsav in the *Jerusalem Post*

2002: “The Palestinian threat harbors cancer-like attributes that have to be severed. There are all kinds of solutions to cancer. Some say it’s necessary to amputate organs but at the moment I am applying chemotherapy.” —Israeli Chief of General Staff Moshe Ya’alon, later (2013-2016) Minister of Defense



27 March 2002: “**The Passover Massacre** A terrorist attack kills thirty people at a Passover celebration at a hotel in the Israeli city of Netanya. As a result, the Israeli military reoccupies portions of the West Bank, including the city of Ramallah, where the Palestinian Authority is located and where Yasir Arafat has his West Bank headquarters.” —[Council on Foreign Relations](#)

23 June 2002: “**Israel West Bank Barrier building begins** Israel begins building a security barrier in the West Bank to protect Israeli cities and towns from terrorist attacks. The barrier, which is a wall in some stretches and a fence in others, is controversial because in places it cuts deep into West Bank territory to protect settlements. Palestinians are cut off from Jerusalem, some Palestinian villages are sliced in half, and some Palestinians are unable to get to work or school as a result of the security barrier’s path. Israel’s Supreme Court forces changes in the barrier’s route, but the barrier continues to impede Palestinian movement and commerce in

certain areas.” —[Council on Foreign Relations](#)

2003: “[The Palestinians are] crocodiles.” —Israeli Prime Minister Ehud Barak

30 April 2003: “**Roadmap for Peace** The Quartet, an informal group created to pursue Middle East peace comprising the United States, Russia, the United Nations, and the European Union, puts forth a Road Map for Peace based on the outline President Bush offered in his 2002 speech. The road map lays out a plan for peace based on Palestinian reforms and a cessation of terrorism in return for an end to Israeli settlements and a new Palestinian state.” —[Council on Foreign Relations](#)

August 2004: “Those evildoers, the Arabs. It says in the Gemara religious texts that God is sorry that he ever created those sons of Ishmael.” —Rabbi Ovadia Yosef, former Chief Rabbi of Israel

15 December 2004: “They are evil and damnable. ... It is forbidden to be merciful to them. You must send missiles to them and annihilate them. They are evil and damnable. The Lord shall return the Arab’s deeds on their own heads, waste their seed and exterminate them, devastate them and vanish them from this world.” —Rabbi Ovadia Yosef, former Chief Rabbi of Israel

August 2005: “**Israel disengages with Gaza** Israeli forces withdraw from Gaza 38 years after capturing it from Egypt, abandoning settlements and leaving it under the control of the Palestinian Authority.” —[Aljazeera](#)

August 2005: “Israeli forces unilaterally withdraw from Gaza 38 years after capturing it from Egypt in the Middle East war, abandoning settlements and leaving the enclave under the control of the Palestinian Authority.” —[Reuters](#)

15 August 2005: “Israel begins a unilateral withdrawal of settlers and military forces from the Gaza Strip. The Israeli military remains in control of Gaza’s borders (except the Gaza-Egypt border, which is controlled by Egypt), airspace, and coastline. After Israel’s withdrawal, Hamas, Palestinian Islamic Jihad, and other smaller militant groups fire rockets from Gaza into southern Israel.” —[Council on Foreign Relations](#)

16 November 2005: “In 2005 an Israeli Soldier emptied his entire magazine (17 bullets) into a 13 year old Palestinian schoolgirl.

He said he would do the same if she was a 3 year old.

The young girl was shot in her arms, legs, hands, chest and 3 times in her face.

The Israeli soldier was given NOT GUILTY by an Israeli Military Court” —[Pelham](#); article at [The Guardian](#)

“Captain R” was cleared of charges of illegal use of his weapon, conduct unbecoming of an officer, and perverting the course of justice by asking soldiers under his command to alter their accounts of the incident.

The 13 year old Palestinian girl was Iman al-Hams. She wandered near an Israeli army post near Rafah refugee camp in Gaza.

The transcript The following is a recording of a three-way conversation that took place between a soldier in a watchtower, an army operations room and Capt R, who shot the girl

From the watchtower [three-way conversation between watchtower soldier, the operations room in another location, and finally, Captain R, the officer on the ground near watchtower “It’s a little girl. She’s running defensively eastward.” “Are we talking about a girl under the age of 10?” “A girl about 10, she’s behind the embankment, scared to death.” “I think that one of the positions took her out.” “I and another soldier ... are going in a little nearer, forward, to confirm the kill ... Receive a situation report. We fired and killed her ... I also confirmed the kill. Over.”

From the operations room “Are we talking about a girl under the age of 10?”

Watchtower “A girl about 10, she’s behind the embankment, scared to death.”

A few minutes later, Iman is shot from one of the army posts

Watchtower “I think that one of the positions took her out.”

Captain R “I and another soldier ... are going in a little nearer, forward, to confirm the kill ... Receive a situation report. We fired and killed her ... I also confirmed the kill. Over.”

Capt R then “clarifies” why he killed Iman

“This is commander. Anything that’s mobile, that moves in the zone, even if it’s a three-year-old, needs to be killed. Over.”

January 2006: “ Hamas, an armed group, wins the majority of seats in a Palestinian legislative election.” — [Aljazeera](#)

25 January 2006: “The Islamist group Hamas wins a majority of seats in a Palestinian legislative election. Israel and the U.S. cut off aid to Palestinians because Hamas refuses to renounce violence and recognise Israel.” — [Reuters](#)

29 January 2006: “**Hamas expands power in Gaza** Hamas defeats Fatah, a Palestinian political faction founded in 1950s which was a long dominant faction within the Palestine Liberation Organization (PLO), in Palestinian elections. The United States and other countries suspend their aid to the Palestinian Authority (PA) because they consider Hamas to be a terrorist organization. Fatah and Hamas make a deal to govern the West Bank and Gaza Strip together. The deal quickly fails, and Hamas takes over the Gaza Strip in 2007.” — [Council on Foreign Relations](#)

June 2006: “ Hamas captures Israeli army conscript Gilad Shalit in a cross-border raid from Gaza, prompting Israeli air raids and incursions.” — [Aljazeera](#)

25 June 2006: “ Hamas militants capture Israeli army conscript Gilad Shalit in a cross-border raid from Gaza, prompting Israeli air strikes and incursions. Shalit is finally freed more than five years later in a prisoner exchange.” — [Reuters](#)

25 June 2006: “**Gilad Shalit taken hostage** Hamas operatives kidnap an Israeli soldier named Gilad Shalit on Israeli soil near the Gaza Strip. The Israeli military tries and fails to free him. He is held in captivity in Gaza until Israel—with the help of Egypt and the United States—negotiates his release in 2012.” — [Council on Foreign Relations](#)

2007: “The Gaza Strip has been under an Israeli sea and air blockade since 2007.”

—[Aljazeera](#)

April 2007: “I am a Zionist. You don’t have to be a Jew to be a Zionist.” —Senator Joe Biden on Shalom TV

14 June 2007: “ Hamas takes over Gaza in a brief civil war, ousting Fatah forces loyal to Palestinian President Mahmoud Abbas, who is based in the West Bank.” —[Reuters](#)

2008: Palestinian deaths and injuries: 3,202; Israeli deaths and injuries 853 —as documented by the UN.

December 2008: “Israel launches a 22-day military offensive in Gaza after rockets were fired at the southern Israeli town of Sderot. About 1,400 Palestinians and 13 Israelis killed before a ceasefire is agreed upon ” —[Aljazeera](#)

27 December 2008: “Israel launches a 22-day military offensive in Gaza after Palestinians fire rockets at the southern Israeli town of Sderot. About 1,400 Palestinians and 13 Israelis are reported killed before a ceasefire is agreed.” —[Reuters](#)

27 December 2008: “**Israel attacks the Gaza Strip** Israel attacks the Gaza Strip following nearly eight hundred rocket attacks from Gaza on Israeli towns in the months of November and December. The war lasts less than a month but kills hundreds of civilians, in addition to hundreds of combatants, and sparks international criticism.” —[Council on Foreign Relations](#)

2009: Palestinian deaths and injuries: 7,460; Israeli deaths and injuries 123 —as documented by the UN.

1 february 2009: “You know very well, and the stupid Amewricans know equally well, that we control their government irrespective of who sits in the White House. You see, I know it and you know that no American president can be in a position to challenge us even if we do the unthinkable. What can they (Americans) do to us? We control congress, we control the media, we control show biz, and we control everything in America. In America you can criticize God, but you can’t criticize Israel.” —[Tzipora Menache](#), Israeli spokesperson

“Israel dropped more than a thousnad tons of explosives, including white phosphorus and DIME (Dense Inert Metal Explosive) bombs, during three weeks on the virtually unarmed densely populated 360 square Kilometers Gaza Strip.”

Protocol III of the 1980 Convention on Certain Conventional Weapons made the use of white phosphorus an international war crime.

Entire blocks of residential homes were flattened. Farms, farm animals, and crops were targeted and incenerated. Religious buildings, cemetaries, schools, and emergency shelters were bombarded. UN buildings were bombed. Medical centers and hospitals wereretargeted. Journalists were targeted.

2010: Palestinian deaths and injuries: 1,659; Israeli deaths and injuries 185 —as documented

by the UN.

22 September 2010: Journalist Gideon Levy (son of Holocaust parents and a one-time aide to former president Shimon Peres) wrote that Golda Meir told him “We will never forgive the Arabs for forcing us to kill their children. We are the victims. We are forced to kill their children and poor us. As the victim and the only victim in history, again, it enabled us the rights to do whatever we want and nobody is going to tell us what to do because we are the only victims.” — Golda Meir

2011: Palestinian deaths and injuries: 2,260; Israeli deaths and injuries 136 —as documented by the UN.

2012: Palestinian deaths and injuries: 4,936; Israeli deaths and injuries 578 —as documented by the UN.

9 August 2012: “U.S Rep. Joe Walsh went on another anti-Islam tirade Wednesday, calling for an end to “political correctness” in dealing with the “radical strain of Islam” he described as an imminent danger to America.

“It’s a real threat,” Walsh said at a town hall meeting in Elk Grove Village, Ill. “And it’s a threat that is much more at home now than it was right after 9/11.”

“It’s here,” he continued, referring to “radical Islam” in the suburbs of Chicago. “It’s in Elk Grove, it’s in Addison, it’s in Elgin. It’s here.”

The remarks -- captured on tape -- came in response to an Egyptian-American audience member who said Muslims are taking over America and charged the freshman congressman to take a more aggressive stance against the religion.

“I’m looking for some godly men and women in the Senate, in the Congress, who will stand in the face of the danger of Islam in America without political correctness,” the man said “Islam is not the peaceful, loving religion we hear about.”

The line was met with applause.

Walsh responded by asserting that radical Muslims are “trying to kill Americans every week,” and that “it’s not a matter of ‘if’ and it’s a matter of ‘when’” a 9/11-like attack will happen again.

“All I can tell you about the ‘when’ is, the people who would want to do this to America are trying to get their hands on weapons that will make 9/11 look like child’s play.”

Added Walsh: “So we had better be alert to this. And as [the audience member] said ... ‘Enough with political correctness!’”

The crowd, which was mostly white, applauded.

“Can you say ‘Fort Hood’?” Walsh continued, referring to the 2009 shooting at the Texas military base that left 13 dead and 29 wounded. A report concluded the shooter, Nidal Malik Hasan, was a homegrown terrorist.

“Your government was so afraid of doing its job, so afraid of offending Islam, that right in front of our noses, they saw what was happening at Fort Hood and because the government’s politically correct, Americans died.”

The Tea Party Republican, who serves on the Homeland Security Committee, has been known for his incendiary remarks since winning his House seat in 2010. He set off a media firestorm last

month when he appeared to question the heroism of his opponent, Democrat Tammy Duckworth, an Iraq war vet who lost both her legs in combat.” —[Salon](#)

November 2012: “I am happy to be a fascist!” —Israeli Minister of Culture Miri Regev



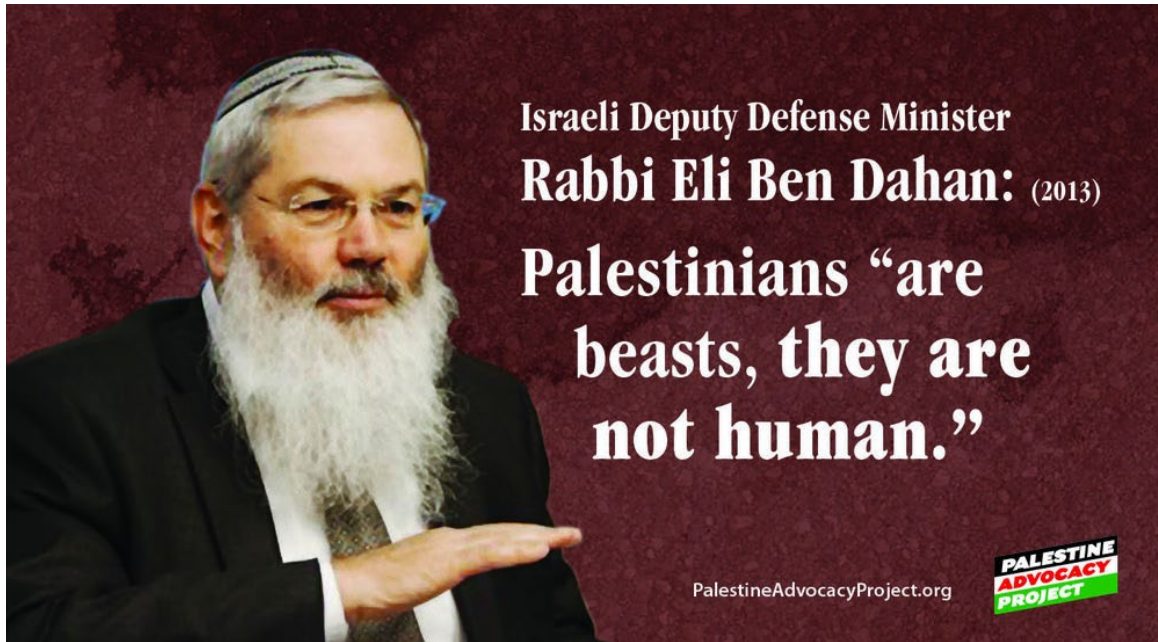
November 2012: “Israel kills Hamas’s military chief of staff, Ahmad Jabari, followed by eight days of Israeli air raids on Palestine.” —[Aljazeera](#)

7 November 2012: “The goal of the operation is to send Gaza back to the Middle Ages. Only then will Israel be calm for forty years.” —Israeli Interior Minister Eli Yishai



14 November 2012: “Israel kills Hamas’s military chief of staff, Ahmad Jabari. Eight days of Palestinian militant rocket fire and Israeli air strikes follow.” —[Reuters](#)

2013: “[Palestinians] are beasts, they are not human.” —Israeli Deputy Defense Minister Rabbi Eli Ben Dahan



2013: Palestinian deaths and injuries: 4,031; Israeli deaths and injuries 157 —as documented by the UN.

March 2013: “It was at that table that I learned that the only way to ensure that it could never happen again was the establishment and the existence of a secure, Jewish state of Israel. I remember my father, a Christian, being baffled at the debate taking place at the end of World War II that any country could object to the founding of Israel on the ruins of the Palestinian homeland.

That’s why we’ve worked so hard to make sure Israel keeps its qualitative edge in the midst of the Great Recession. I’ve served with eight presidents of the United States of America, and I can assure you, unequivocally, no president has done as much to physically secure the State of Israel as President Barack Obama.” —Vice President Joe Biden at the AIPAC conference

28 July 2013: “**negotiations face continued hurdles** Secretary of State John Kerry seeks to restart final status negotiations. The process begins with Israel’s agreement to release 104 Palestinian prisoners and Palestinians’ agreement not to use their new observer state status at the United Nations to advance the cause of statehood. Negotiations between Israel and the Palestinian Authority collapsed in April 2014 over such issues as Israeli settlement growth, the status of a final round of prisoners, and Palestinian attempts to join several international organizations.” —[Council on Foreign Relations](#)

2014: Palestinian deaths and injuries: 19,860; Israeli deaths and injuries 2,796 —as documented by the UN.

23 April 2014: “**tensions between the PLO and Hamas** The PLO and Hamas sign an agreement to form a unity government. Tensions between the factions remain, however, and no

unity government is formed. Gaza and the West Bank remain disconnected and under the control of rival Palestinian leaderships.” —[Council on Foreign Relations](#)

14 July 2014: “Behind every terrorist stand dozens of men and women, without whom he could not engage in terrorism. They are all enemy combatants, and their blood shall be on all their heads. Now this also includes the mothers of the martyrs, who send them to hell with flowers and kisses. They should follow their sons, nothing would be more just. They should go, as should the physical homes in which they raised the snakes. Otherwise, more little snakes will be raised there.

They have to die and their houses should be demolished so that they cannot bear any more terrorists. They are all our enemies and their blood should be on our hands. This also applies to the mothers of the dead terrorists.

The entire Palestinian people is the enemy, including its elderly and its women, its cities and its villages, its property and its infrastructure.” —Israeli Minister of Justice Ayelet Shaked on Facebook



30 June 2014: “Not nuking these fucking animals is the only restraint I expect and that’s only because the cloud would hurt Israelis.” —deleted tweet from Bethany S. Mandel



July-August 2014: “The kidnap and killing of three Israeli teenagers by Hamas leads to a seven-week war in which more than 2,100 Palestinians are reported killed in Gaza and 73 Israelis are reported dead, 67 of them military.” —[Reuters](#)

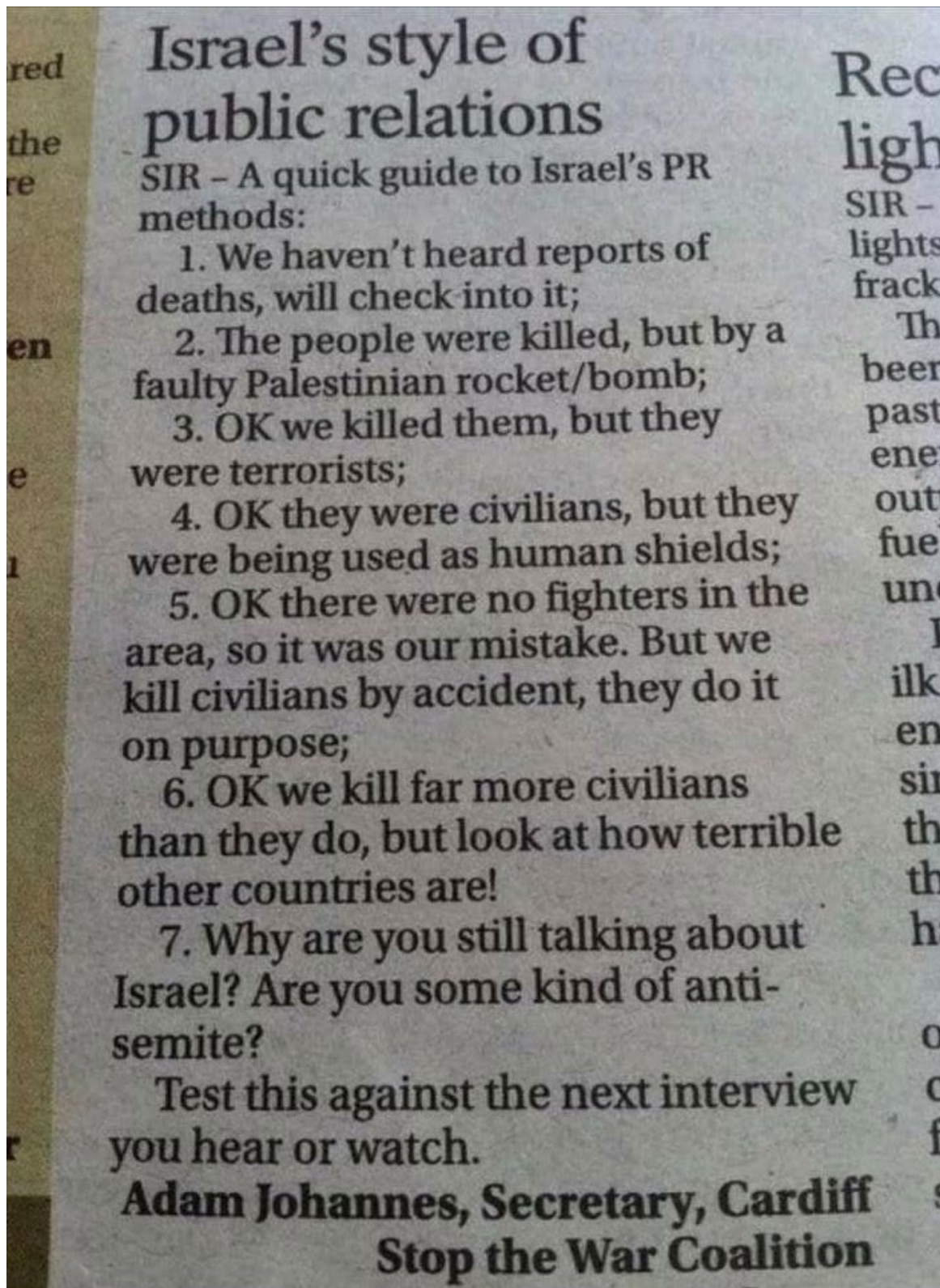
July-August 2014: “The kidnap and killing of three Israeli teenagers by Hamas leads to a seven-week war in which more than 2,100 Palestinians are killed in Gaza along with 73 Israelis, including 67 soldiers.” —[Aljazeera](#)

8 July 2014 - 26 August 2014: “**Operation Protective Edge** After tit-for-tat attacks on Israeli and Palestinian civilians by extremists on both sides, Israel invades the Gaza Strip. The operation, code-named Protective Edge, lasts for fifty days, killing about two thousand Gazans, sixty-six Israeli soldiers, and five Israeli civilians. Unlike the conflicts from 2008 to 2009 and in 2012, Palestinian rocket fire targets major Israeli cities. The war ends after the United States, in consultation with Egypt, Israel, and other regional powers, brokers a cease-fire.” —[Council on Foreign Relations](#)

2 August 2014: “Israel’s style of public relations.

A quick guide to Israel's PR methods:

- 1 We haven't heard reports of deaths, will check into it;
 2. The people were killed, but by a faulty Palestinian rocket/bomb;
 3. OK we killed them, but they were terrorists;
 4. OK they were civilians, but they were being used as human shields;
 5. OK there were no fighters in the area, so it was our mistake. But we kill civilians by accident, they do it on purpose;
 6. OK we kill far more civilians than they do, but look at how terrible other countries are!
 7. Why are you still talking about Israel? Are you some kind of anti-semite?
- Test this against the next interview you hear or watch.” —Adam Johannes, Secretary, Cardiff, Stop the War Coalition, letter to a Welsh newspaper



7 August 2014: WikiLeaks releases documents showing that Israel actively supported Hamas in an attempt to end the First Intifada: [Jerusalem Online](#)

6 December 2014: “We always talk about Israel from this perspective, as if we’re doing (them) some favor. We are meeting a moral obligation. But it is so much more than a moral obligation. It is overwhelmingly in the self-interest of the United States of America to have a secure and democratic friend, a strategic partner like Israel. It is no favor. It is an obligation, but

also a strategic necessity. ... If there weren't an Israel, we would have to invent one.” —Vice President Joe Biden at the annual Saban Forum at the Brookings Institution in Washington

2015: “Those who are against us, there's nothing to be done — we need to pick up an axe and cut off his head.” —Israeli Defense Minister Avigdor Lieberman



2015: Palestinian deaths and injuries: 14,813; Israeli deaths and injuries 339 —as documented by the UN.

April 2015: “My name is Joe Biden, and everybody knows I love Israel. ... Sometimes we drive each other crazy. But we love each other. And we protect each other. As many of you heard me say before, were there no Israel, America would have to invent one. We'd have to invent one because ... you protect our interests like we protect yours.” —Vice President Joe Biden at the 67th annual Israeli Independence Day Celebration in Jerusalem

2016: “We must defend ourselves against the wild beasts.” —Israeli Prime Minister Benjamin Netanyahu



2016: Palestinian deaths and injuries: 3.572; Israeli deaths and injuries 222 —as documented by the UN.

1 April 2016: “Palestinian requests to convert to Judaism rejected automatically
Rabbi Yitzhak Peretz, director of the Israeli government’s Conversion Authority, made the statement earlier this week, according to NRG.

Israel’s authority handling conversions to Judaism rejects Palestinian applicants without review because of their ethnic origin, its head said.

Rabbi Yitzhak Peretz, director of the Israeli government’s Conversion Authority, spoke about his organization’s handling of requests by Palestinians to convert on Tuesday during a discussion on conversions at the State Control Committee of the Knesset, the Israeli parliament, the news site NRG reported.

To initiate an officially recognized conversion to Judaism in Israel, foreigners need to apply to the special cases panel of the Conversion Authority.

“The threshold requirements” to be considered by the special cases panel, he said, “are that applicants be sincere and that they are not foreign workers; infiltrators; Palestinian or illegally in the country.” In 2014, he added, the special cases committee received 400 applications. “Half of the applicants were accepted, the rest were rejected as foreign workers, infiltrators, illegal stayers and Palestinians,” he said.

Conversions to Judaism by Palestinians are rare in Israel.

Israel’s Declaration of Independence, which is the legal basis for the country’s basic laws - a set often referred to the equivalent of Israel’s constitution - ensures “absolute social and political equality to all its citizens regardless of faith, race and gender.”

The Israeli government fears that Palestinian attempts to convert to Judaism would be a covert form of realizing “the right of return,” which is demanded by Arabs who were forced to flee or fled their former homes and lands in pre-state Israel just before the state’s founding.” —[The Jerusalem Post](#)

12 July 2016: “Outgoing chief rabbi, Brig. Gen. Rafi Peretz, of the Israeli Defense Forces, who is stepping down after six years in the position is being replaced. And, his successor, Rabbi Col. Eyal Karim’s appointment is being met with backlash — as he is outspoken for allowing soldiers to rape women during wartime.

Karim, who was announced on Monday as the intended new IDF chief rabbi, has provoked controversy with previous misogynistic statements, such as opposing female conscription and implying that rape was permissible in times of war.

According to *Ynet News*, Karim has been serving as the head of the Rabbinate Department in the Military Rabbinate. He is an alumnus of the Bnei Akiva Nachalim and the Ateret Cohanim yeshivas, and he served previously as a combat paratrooper, eventually commanding their elite reconnaissance unit, before taking a break from the military and eventually returning to its rabbinate.

In 2012, Karim’s controversy started when the Hebrew religious website KIPA, asked him, in the light of certain biblical passages, if IDF soldiers were permitted to commit rape during wartime despite the general understanding that such an act is widely considered repugnant.

His answer enraged many Israelis.

“Although intercourse with a female gentile is very grave, it was permitted during wartime (under the conditions it stipulated) out of consideration for the soldiers’ difficulties,” he wrote. “And since our concern is the success of the collective in the war, the Torah permitted [soldiers] to satisfy the evil urge under the conditions it stipulated for the sake of the collective’s success.”

In other words, soldiers can rape innocent women during times of war in order to keep their morale up.

The head of the Knesset Committee on the Status of Women and Gender Equality, MK Aida Touma-Sliman (Joint Arab List), said, “Col. Karim’s ruling on permitting raping non-Jewish women is similar to the fatwa of a murderous organization that’s not so far from Israel’s borders. I will contact the attorney general and oppose the appointment, and I call on female and male members of Knesset to join my request.”

The chairperson of Na’amat — Movement of Working Women & Volunteers, Galia Wolloch, said, “Anyone who thinks that rape is okay as a morale-booster for soldiers, so long as it’s of gentile women, cannot lead the army to good moral and spiritual places.”

When he is not advocating for the rape of women, Karim is outspoken about refusing to allow women in the IDF.

Karim wrote in 2002 that it was explicitly forbidden.

“In a situation such as the one during the War of Independence, in which there was a real *Épikuah nefesh* [matter of life or death] of the Jewish people, women also participated in the defense of the nation and country, even though the situation was not so modest,” he wrote. “But in our era, we do not live with a real threat to our survival.

“And because of the liable damage to the modesty of the girl and the nation, the great rabbis and the Chief Rabbinate have ruled that the enlistment of girls to the IDF is entirely forbidden.”

Karim is also outspoken about women singing at military events. If a woman sings at an event, he claims, men should not have to attend as it is repugnant.” —[Mint Press](#)

150 Zionist rabbis wrote in support of him, stating that “the attempt to disqualify the rabbi’s appointment due to his legitimate Torah positions is an attempt that will severely harm the entire

Torah world in the State of Israel and the Israel Defense Forces”

Karim is now [2023] a brigadier general, giving spiritual guidance to Israeli soldiers terrorizing Gaza.” —a href="https://twitter.com/dancohen3000/status/1731410783295180973" class="externallink">Dan Cohen



2017: “**Stage One: Voctory Through Settlement**”

The first and most important stage in the decisive “One Hope” plan will be involve settlement. At this stage we will establish the most importatn basic fact: We are here to stay. We will make it clear that our national ambitiiion for a Jewish State from the river to the sea is an accomplished fact, a fact not open to discussion or negotiation.” —Israel’s Decisive Plan, written by Bezalel Smotrich

6 December 2017: “**The U.S. formally recognizes Jerusalem as the capital of Israel** Changing long-standing U.S. policy, President Trump formally recognizes Jerusalem as the capital of Israel. He also pledges to move the U.S. embassy from Tel Aviv to that city, though this is not set to occur immediately. Numerous foreign leaders, including those of Egypt, France, Saudi Arabia, Turkey, and the United Kingdom, along with UN Secretary-General Guterres,

criticize the policy change. It also sparks protests and violence throughout East Jerusalem, Gaza, and the West Bank, as well as in Egypt, Jordan, Iran, and Iraq. In January 2018, President of the State of Palestine Mahmoud Abbas declines to meet with U.S. Vice President Mike Pence during Pence's trip to the region.” —[Council on Foreign Relations](#)

2018: Palestinian deaths and injuries: 31,558; Israeli deaths and injuries 130 —as documented by the UN.

March 2018: “Palestinian protests begin at Gaza's fenced border with Israel. Israeli troops open fire to keep protestors back. More than 170 Palestinians are reported killed in several months of protests, which also prompt fighting between Hamas and Israeli forces.” —[Reuters](#)

March 2018: “Palestinian protests begin at Gaza's fenced border with Israel and Israeli troops open fire to keep them back. More than 170 Palestinians killed in several months of protests, prompting fighting between Hamas and Israeli forces.” —[Aljazeera](#)

24 May 2018: “Israel's Supreme Court on Thursday rejected a legal challenge to the military's rules on when soldiers can fire their weapons amid weeks of violent protests that have killed dozens of Palestinians on the border with Gaza.

Six human rights groups had asked the court to declare as unlawful any regulations that allow soldiers to open fire at unarmed civilians.

But in its unanimous ruling, the court sided with the Israeli military, which argued that the protests were taking place in the context of a long-running armed conflict with the Islamic militant group Hamas which rules Gaza and that weapons-use regulations are subject to the rules of armed conflict. Such rules provide greater leeway for the use of lethal force than those governing law enforcement practices.

Yesh Din, one of the rights groups that brought the challenge, slammed the court's decision.

“The judges missed an opportunity to prevent the continuation of the killing and injuries,” the group said on Twitter.

Israeli fire has killed more than 100 Palestinians in weeks of violent protests along Israel's border with the Gaza Strip. Nearly 60 of those were killed May 14, the deadliest protest day that also saw hundreds of Palestinians wounded.

Organizers said the protests were meant in part to break a decade-old Israeli-Egyptian blockade on the Gaza Strip. But Israel, which has faced blistering international criticism over its response, accuses Hamas of using the weekly border protests as cover to stage attacks.

The Israeli army has defended its actions. It points to the violent history of Hamas, says there have been shootings and bombing attacks against its forces, and fears a mass border breach.

On Twitter, Israeli Defense Minister Avigdor Lieberman welcomed the ruling and criticized the rights groups for challenging the military.” —[AP News](#)

2019: Palestinian deaths and injuries: 15,628; Israeli deaths and injuries 133 —as documented by the UN.

25 March 2019: “**The U.S. recognizes Israeli sovereignty over the Golan Heights** The Trump administration recognizes Israeli sovereignty over the Golan Heights, which Israel had

formally annexed from Syria in 1981. The United States is the first country other than Israel to recognize Israel's sovereignty over the territory.” —[Council on Foreign Relations](#)

31 October 2019: “The idea that we would draw military assistance from Israel, on the condition that they change a specific policy [Bernie Sanders had recommended withholding billions of dollars from Israel to force it to change its policies regarding Jewish settlement in the Palestinian West Bank], I find to be absolutely outrageous. No, I would not condition it, and I think it's a gigantic mistake. And I hope some of my candidates who are running with me for the nomination — I hope they misspoke or they were taken out of context.” —Joe Biden in an interview with the *Wall Street Journal*

2020: Palestinian deaths and injuries: 2,781; Israeli deaths and injuries 61 —as documented by the UN.

28 January 2020: “**Trump administration launches proposed peace plan** Trump unveils his administration's proposed Israeli-Palestinian peace plan, crafted by U.S. and Israeli diplomats without Palestinian input. The plan calls for a two-state solution with significant economic aid to the Palestinians. Many analysts criticize the plan as being one sided, stipulating impossible requirements for Palestinian statehood and paving the way for Israeli annexation of the West Bank. Palestinian authorities reject the plan immediately. Following the plan's announcement, Netanyahu announces Israel's plan to annex portions of the West Bank as outlined in Trump's proposal.” —[Council on Foreign Relations](#)

March 2020: “Israelis wake up every morning facing an existential threat from their neighbors' rockets from Gaza, just like this past week. ... That's why I've always been adamant that Israel must be able to defend itself. It's not just critical for Israeli security. I believe it's critical for America's security. ... [Palestinians] need to end the rocket attacks from Gaza. ... They need to accept once and for all the reality and the right of a secure democratic and Jewish state of Israel in the Middle East.” —Joe Biden at the annual conference of AIPAC

15 September 2020: “**relations between some Arab countries and Israel normalize** Bahrain and the United Arab Emirates agree to normalize diplomatic relations with Israel, becoming the first Arab countries to do so in over twenty-five years. In return, Israel announces the suspension of its plans to annex territory in the West Bank. Morocco and Sudan subsequently also sign on to the agreement and normalize relations with Israel.” —[Council on Foreign Relations](#)

2021: “**2021 Israel-Palestine Crisis** Evictions of Palestinians in East Jerusalem and clashes at al-Aqsa Mosque spark conflict between Israel and Hamas. Over two hundred people in Gaza and at least ten in Israel die. The Biden administration helps mediate a truce and restores some U.S. aid and diplomatic contact with the Palestinians.” —[Council on Foreign Relations](#)

May 2021: “After weeks of tension during the Muslim fasting month of Ramadan, hundreds of Palestinians are wounded in clashes with Israeli security forces at the Al Aqsa compound in Jerusalem, Islam's third holiest site.

After demanding Israel withdraw security forces from the compound, Hamas unleashes a barrage of rockets from Gaza into Israel. Israel hits back with air strikes on Gaza. Fighting goes on for 11 days, killing at least 250 people in Gaza and 13 in Israel.” —[Reuters](#)

May 2021: “After weeks of tension during the Muslim holy month of Ramadan, hundreds of Palestinians are injured by Israeli security forces at the Al-Aqsa Mosque compound in Jerusalem. Hamas demanded Israel withdraw security forces from the compound. Israel launched air raids on Gaza in response to what it said were rockets fired from Gaza. In the fighting that went on for 11 days, at least 260 people were killed in Gaza and 13 died in Israel.” —[Aljazeera](#)

7 May 2021: Israel claims Palestinians threw stones at Israeli police forces in Jerusalem. Israeli police stormed the Al-Aqsa Mosque compound using tear gas, rubber bullets, and stun grenades during religious services, injuring more than 300 worshippers. The Al-Aqsa Mosque is the third holiest site in Islam and the attack occurred during the holy month of Ramadan.

10 May 2021: Hamas gave Israel an ultimatum to withdraw security forces from the Temple Mount complex and Sheikh Jarrah by 6 p.m. At 6 p.m. Hamas and Palestinian Islamic Jihad (PIJ) fired rockets from Gaza into Israel. Some hit Israeli homes and a school. Israel responded with a week of airstrikes, demolishing 18 buildings (including four high rise buildings), 40 schools, four hospitals, and 19 medical facilities, as well as striking the al-Shati refugee camp. By 17 May Israeli airstrikes had destroyed 94 buildings in Gaza, including the al-Jalaa Highrise, which housed offices of the Associated Press, the Al-Jazeera Media Network, and other news organizations. 256 Palestinians (including 66 children) and 13 Israelis (including two children) were killed.

11 May 2021: “There is no escape from the collapse of Hamas.

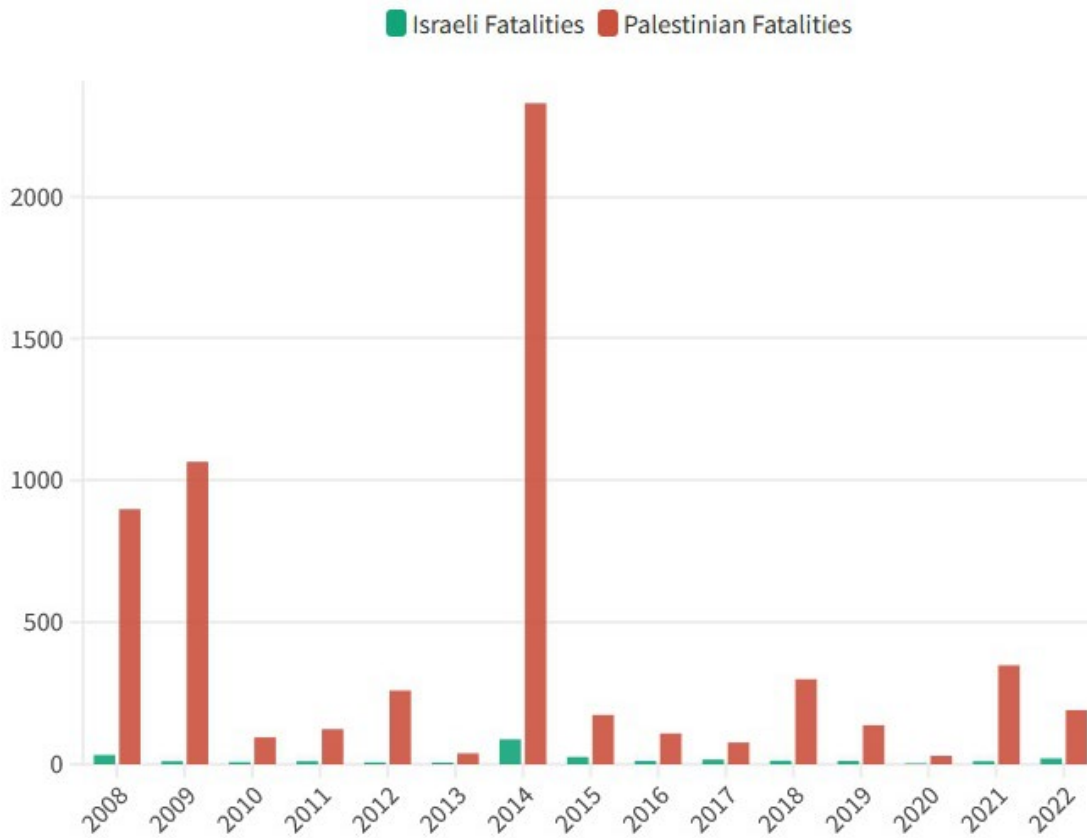
Flatten the strip.” Bezael Smotrich, Chairman of the Religious Zionist Party, and political partner of Netanyahu — screenshot reported by [Palestine in the UK](#)

2022: “**Deadly year in Israeli-Palestinian Conflict** Israel launches a counterterrorism operation in the West Bank in response to attacks by Palestinians against Jewish Israelis. The operation and resulting resurgence contribute to the deadliest year for both sides since 2005, an uptick in violence that only turned out to rise in 2023.” —[Council on Foreign Relations](#)

August 2022: “At least 44 people, including 15 children, are killed in three days of violence that begin when Israeli air strikes hit a senior Islamic Jihad commander.

Israel says the strikes were a pre-emptive operation against an imminent attack by the Iranian-backed militant movement, targeting commanders and arms depots. In response, Islamic Jihad fires more than 1,000 rockets towards Israel. Israel’s Iron Dome air defence system prevents any serious damage or casualties.” —[Reuters](#)

August 2022: “More than 30 Palestinians, including women and children, killed in new air attacks carried out by Israeli planes. Palestinian Islamic Jihad, whose two commanders were killed in the air strikes, fires dozens of rockets into Israel in response.” —[Aljazeera](#)



Source: [United Nations Office for the Coordination of Humanitarian Affairs](#)

January 2023: “Islamic Jihad in Gaza fires two rockets towards Israel after Israeli troops raid a refugee camp and kill seven Palestinian gunmen and two civilians. The rockets set off alarms in Israeli communities near the border but cause no casualties. Israel responds with air strikes on Gaza.” —[Reuters](#)

1 March 2023: “Palestinian ‘village of Hawara needs to be wiped out’ Israel’s far-right Finance Minister justifies ‘disproportionate’ response to terrorism.

Days after settlers went on the rampage in Hawara, Finance Minister Bazalel Smotrich, who is also a minister in the Defense Ministry, doubles down on supporting its destruction and denies that ‘Jewish terrorism’ exists.” —Haaretz

18 March 2023: “Think about the hundreds of millions of dollars being spent on pro-Israel advocacy in the US each year, while there is not even a Palestinian lobby to speak of in the US.” —[Khaled Elgindy](#)



22 May 2023: “Converting to Judaism in Israel is nearly impossible - ITIM report

The number applying for conversion in the last decade has been low but even among those who did apply, fewer than half were able to complete the process.

Ahead of Shavuot, the Jewish holiday that highlights conversion, a study released Monday shows that more than 500,000 Israeli citizens defined as “irreligious” Jews find that the conversion system in Israel prevents them from converting.

During Shavuot, the Book of Ruth is read in synagogues about Ruth, the most famous and significant convert to Judaism.

According to the annual conversion report by the nonprofit advocacy organization ITIM and the Menomadin Center for Jewish and Democratic Law, the number of people applying for conversion in the last decade has been low, but even among those who did apply and attended the conversion preparation courses, fewer than half were able to complete the conversion process successfully.

If they actually are accepted for conversion by the Chief Rabbinate, receipt of the conversion certificate, which culminates the process, may be delayed for many months, the report said.

ITIM and the Menomadin Center for Jewish and Democratic Law at Bar-Ilan University, which published their first planned annual report on the conversion system, cited a series of failures in the implementation of the process.

Even though conversion is one of the most contentious issues in Israeli Jewish society, “the conversion system continues to make it difficult for converts and thus distances those considered as Zera Israel [seed of Israel, those who are not halachically Jewish, having no Jewish mother, but who have Jewish ancestry, such as a Jewish father] from the people of Israel,” the report said.

According to the study, which examined the conversion system data, it appears that it failed in its main purpose, “to make conversion accessible to those interested in it.”

“Instead of recognizing the huge national challenge of half a million citizens who feel Jewish and live as Jews, but are not [Jewish] according to Halacha, the Chief Rabbinate adopts rigid and strict halachic approaches, which distance it from potential converts,” the report said.

“Instead of adopting acceptable halachic approaches, which acknowledge them as Zera Israel [and therefore of a different status than gentiles], the rabbinate’s conduct results in fewer than

4,000 people applying each year to the conversion system and fewer than 2,000 successfully completing the procedure,” it said.

According to data provided by government ministries, 3,904 cases were opened in 2022, representing an increase of about 45% over the past nine years and an increase of more than 60%, compared with 2019.” —[The Jerusalem Post](#)

18 June 2023: “Israel gave preliminary approval for the development of a gas field off the Gaza Strip on Sunday while saying it would require security coordination with the Palestinian Authority and neighbouring Egypt.

If concluded, the agreement would be a boost for the cash-strapped Palestinian economy.

Announcing the move on the Gaza Marine project, Prime Minister Benjamin Netanyahu’s office said progress would hinge on “preserving the State of Israel’s security and diplomatic needs”.

While Egypt and Israel have been producing gas in the eastern Mediterranean for years, the Gaza Marine field, about 30 km (20 miles) off the Gaza coast, has remained undeveloped due to political disputes and conflict with Israel, as well as economic factors.

Gaza Marine is estimated to hold over 1 trillion cubic feet of natural gas, much more than is needed to power the Palestinian territories and some of which could potentially be exported.

Hamas official Ismail Rudwan told Reuters: “We reaffirm that our people in Gaza have the rights to their natural resources.” ” —[Reuters](#)

NOTE: Chevron purchased the company Noble Energy in 2020 to gain the rights to extract the natural gas from two Israeli offshore gas fields.

19 July 2023: “The U.S. Congressional Resolution on Israel is a sham! The painful truth is that the Israeli state - like the USA - has been racist in practice since its inception. The founding of the Jewish state in response to the indescribable evil of the Holocaust against Jewish humanity produced dispossession and domination of Palestinian peoples. This sad paradox of how a terrorized and traumatized people for two thousand years - precious Jewish people - reproduced terror and trauma for precious Palestinian people in the last seventy-five years reveals our human wretchedness. Massive denial of undeniable evil numbs us to the suffering of others and justifies naked power over the vulnerable. The courageous and compassionate human acknowledgment and resistance to any form of racism and domination is our only hope. The two-state solution has been undercut by hundreds of thousands of Jewish settlers. A call for Palestinian dignity and justice and Jewish security and safety in a secular federated state with UN oversight is our best option! #Israel #Palestine” —[Cornel West](#)

24 August 2023: “My right, my wife’s right, my kids’ right to move around freely on the roads of Judea and Samaria is more important than the right of movement of Arabs. Sorry, Muhammad, but this is the reality.” —Israeli National Security Minister Itamar Ben-Gvir [Middle East Eye](#)

26 September 2023: “JUST IN: Another US Congressman has ONCE AGAIN bought war stocks before the Israel and Palestine conflict.

Representative Josh Gottheimer purchased up to \$15,000 of Northrop Grumman Corp, \$NOC,

on Sept 26.

He sits on the National Security Agency and Intelligence Committees.” —[unusual_whales](#)
(tweet from 16 October 2023)

October 2023: “ Hamas launches the biggest attack on Israel in years from the Gaza Strip, with a surprise assault combining gunmen crossing the border with a heavy barrage of rockets. Islamic Jihad says its fighters have joined the attack.

Israel’s military said it was on a war footing, adding it had carried out strikes targeting Hamas in Gaza and had called up reservists.” —[Reuters](#)

the day before

6 October 2023: You will hear claims that there supposedly was a cease fire prior to 7 October 2023. A Jewish settler shot and killed 19 year old Palestinian university student Labib Dumaidi during a settler attack in the town of Huwara in the occupied West Bank. The settler attack was a combination of the IDF and civilians. If you point out that one death is a small number compared to the number of Israelia and Palestinian deaths the next day, you are missing the point that this is a continuous war and it did not emerge from rainbow-colored peace with no past violence and as action without any possible provocation.

Sources:

“Residents said a group of settlers had erected a tent in Huwara, held prayers and later marched through the town. Some of them were carrying arms and began vandalising shops and cars, they said.

One of the settlers shot university student Labib Dumaidi, who later died of his wounds in hospital, the residents said.

The Israeli military, offering a different account, said its forces fired at a Palestinian who had hurled a brick at an Israeli vehicle during clashes between dozens of settlers and townspeople. It said the suspect was struck by gunfire but did not elaborate on his identity.

Violence again erupted later on Friday when hundreds of people attended Dumaidi’s funeral under the watch of Israeli soldiers.

The Palestinian Red Crescent said at least 51 Palestinians were wounded in clashes with the military during the funeral, mostly from tear gas and rubber-tipped bullets and three from live fire.

In testimony Israeli human rights group Yesh Din collected from Dumaidi’s family, relatives said he had been shot in the chest while standing on the roof of their home trying to ward off settlers who were hurling rocks at the house and vandalising the family’s car.

The Palestinian Foreign Ministry condemned Dumaidi’s killing as a “heinous crime” and called for international intervention to stop armed settler militias.

In a statement, UN Special Coordinator for the Middle East Peace Process, Tor Wennesland, said he was “outraged by the continued incitement, provocations, and lack of accountability” for settler violence.

“It’s clear that the settler militias are protected by the occupation’s soldiers,” said

Thaer Qawareeq, an employee at a supermarket damaged by the settlers, as his colleagues cleaned the pavement of glass shards. “This is the third time settlers shatter the supermarket’s glass exterior.”

Israeli Finance Minister Bezalel Smotrich, who also holds some West Bank powers, said that Israel must take firmer action against Palestinian militants “to save lives and reinstate security.” Smotrich added that he was committed to further developing Jewish settlements, which most countries deem as illegal.

In the first eight months of 2023, an average of three settler-related incidents occurred per day, the highest daily average of settler-related incidents affecting Palestinians since the United Nations started recording this data in 2006.

Huwara is surrounded by settlements that cut off Palestinians from each other and from their land. Located on the main road connecting the northern city of Nablus to Ramallah and Jerusalem, the town has become the scene of repeated settler assaults on Palestinians, military restrictions and shooting attacks on Israelis.” —[Reuters](#)

“Labib Dumaidi, 19, was shot in the heart by an Israeli settler, the Palestinian Ministry of Health said on Friday.

Relatives said he had sought refuge on the roof of his home, which was under assault from settlers, when a settler shot him.

The Israeli military has offered a different account, stating that a suspect was shot after throwing a brick at a vehicle, but offering no details on the victim’s identity.

“More than 200 settlers gathered in the middle of Huwara after midnight, shouting and dancing, some of them with covered faces,” Palestinian resident Abderrahman Dmidi told the news agency AFP.

“They began throwing stones towards some houses, and then the young people ... tried to defend their homes by throwing stones,” he added. Residents said Israeli soldiers turned a blind eye to the violence.

“It’s clear that the settler militias are protected by the occupation’s soldiers,” Thaer Qawareeq, an employee at a supermarket damaged by the settlers in Huwara, told the Reuters news agency. He added that it was the third time that settlers had assaulted the store.

The killing of Dumaidi, a university student, has come amid a rise in settler violence against Palestinians in the West Bank, including instances of mob violence targeting Palestinian towns and residents, often in the presence of Israeli soldiers. Some of the assaults have followed attacks by Palestinians on Israeli settlements and settlers.

The attack on Friday came a day after a Palestinian gunman shot at an Israeli car in Huwara. The town is located on a road between the Palestinian cities of Nablus and Ramallah and is surrounded by Israeli settlements, which are illegal under international law.

The Palestinian Foreign Ministry condemned Dumaidi’s killing as a “heinous crime”

The Palestinian Red Crescent reported that at least 51 Palestinians were injured during a funeral procession for Dumaidi, as Israeli forces fired tear gas, rubber-tipped

bullets, and live fire.

Huwara itself has been the scene of some of the most notable recent cases of settler violence: following the slaying of two Israeli brothers by a Palestinian in February, a mob of right-wing settlers rampaged through the town, firing weapons and killing a 37-year-old man.

Israel's far-right Minister of Finance Bezalel Smotrich aroused controversy when he commented that Huwara should be "wiped out" several days after." — [Al Jazeera](#)

summary of 7 October:

The Official Story Of October Seventh

The official story is that on October 7, 2023, thousands of evil Hamas terrorists broke out of their walled-in enclave and killed approximately 1,200 Israelis for no reason other than because they were evil and wanted to kill Jews. Nothing was done by the Israeli government to provoke this attack, and nothing of any relevance happened prior to this date.

The attack was as undefended as could possibly be; Israeli defense forces did not respond for nine hours despite having received ample warning that an attack was coming for months, from both their own intelligence services and from Egyptian intelligence. No attempt was made to warn the Nova music festival of an impending attack despite Israeli security forces being aware the day before that an attack was coming, resulting in hundreds of deaths and captured hostages. The attack was met with so little resistance that Hamas themselves were reportedly surprised by how many Israelis they were able to capture and kill, their surprise perhaps due to the fact that they'd spent two years training right out in the open less than a mile from the border for an air, sea and land attack using motorized paragliders, drones and motorboats. This is all perfectly normal and not suspicious at all.

Also not at all suspicious is the fact that 100 percent of the 1,200 Israeli deaths on October 7 are being attributed to Hamas despite Israeli media and eyewitness testimony reporting that the IDF was firing indiscriminately into areas full of Israelis. The burned bodies you see in photos of the October 7 devastation were with absolute certainty burned by Hamas, despite the Israeli government's acknowledgement that it had previously misidentified hundreds of dead Hamas fighters as Israeli because they'd been so badly burned by IDF fire that their corpses were unrecognizable.

(The official story of October 7 also previously included narratives about beheaded babies, babies cooked in ovens, and babies ripped from the wombs of pregnant mothers, and you were an evil Jew-hating Holocaust denier if you doubted them, but those narratives have since been walked back and are no longer part of the official story, so belief in them is now optional.)

The murder of 1,200 Israelis was so evil and egregious that it has warranted the killing of more than 16,000 Palestinians in Gaza, including more than 7,000 children. It will likely warrant the killing of far more, because Israeli lives are worth much, much more than Palestinian lives. Only a racist Nazi would believe that Palestinian lives matter.

Israel is not to blame for any of the killings in Gaza anyway, because Hamas is using civilians as human shields. It is anti-semitic to ask how Israel has managed to kill so many human shields while killing astonishingly few Hamas fighters and dealing no meaningful damage to Hamas leadership in the process.

Now that 1.7 million Gazans have been displaced and they are being shoved toward the Egyptian border, it is perfectly fine and normal to be seeing official agendas being pushed by Israeli officials and thought leaders to “thin out” Gaza’s population and relocate them to other countries. Only an evil terrorist supporter would call this ethnic cleansing; one ought to think of it more as a permanent vacation.

If you question any part of this official story, you’re an evil Jew-hating monster who loves terrorism and wishes Hitler had won. You should be censored, fired from your job, kicked off campus and disappeared from polite society, because you support genocide and you want good people to die.

Does this make you feel like you’re going crazy? Good. That means it’s working. That means the official story is taking root in your mind. Let it blossom and bloom inside of you. Stop struggling. Relax. The more you struggle, the more it will hurt. Just let your mind go blank and obey. This will be over before you know it.—as told by [Caitlin Johnstone](#) on 6 December 2023

7 October 2023: “**Hamas launches surprise attack on Israel** Israel faced domestic turmoil over government moves to overhaul the judiciary, all while 2022 marked a renewed level of violence between Israelis and Palestinians. The first nine months of 2023 were characterized by a steady trend of clashes in the West Bank.

On October 7th, 2023, Hamas launched an unprecedented surprise attack on Israel, leading to an explosion of violence. According to Israeli Media, the initial strikes of the conflict led to at least 250 people killed and 1,500 injured in Israel, making it the deadliest attack in the country in decades. The Palestinian Health Ministry, in turn, reported that 232 people in the Gaza Strip were killed and 1,700 wounded in Israeli strikes.

Hamas’s military leader, Mohammed Deif, said the group undertook its assault because of Israel’s long-running blockade of Gaza, its occupation of Palestinian lands, and its alleged crimes against Muslims, including the desecration of the Al-Aqsa Mosque in Jerusalem. Israel’s Prime Minister Benjamin Netanyahu, in turn, responded by announcing that Israel was at war with Hamas. The October 2023 conflict between Israel and Hamas marks the most significant escalation of the ongoing Israeli-Palestinian conflict in several decades.” —[Council on Foreign Relations](#)

7 October 2023: “The Palestinian Islamist movement Hamas launched its biggest assault on Israel in years early on Saturday, firing a barrage of rockets from Gaza and sending fighters across the border.

Israel said it was on a war footing and began its own strikes against Hamas targets in Gaza, with Israeli media reporting gunbattles between bands of Palestinian fighters and security forces in southern Israel.” —[Reuters](#)

7 October 2023 04:57 GMT: **“Early morning fire**

The rocket fire began from multiple locations in Gaza starting at 06:30am local time (03:30 GMT), according to reports.

Israel’s Magen David Adom rescue agency said a 70-year-old woman was critically injured when a rocket hit a building in southern Israel. A 20-year-old man was moderately injured by rocket shrapnel, it said.” — [Aljazeera](#)



Rockets fired by Palestinians fighters into Israel, in Gaza October 7, 2023. [Ibraheem Abu Mustafa/Reuters]

7 October 2023 05:02 GMT: **“Palestinian fighters infiltrated Israel from Gaza: Israeli army**

The Israeli army says a number of Palestinian fighters “have infiltrated” Israel from the Gaza Strip, without providing further information.

“Residents in the area surrounding the Gaza Strip have been asked to stay in their homes,” the army said in a statement.” — [Aljazeera](#)

7 October 2023 0:05 GMT: “ Hamas, the group running the besieged Gaza Strip, has claimed responsibility for the surprise attack.” — [Aljazeera](#)

7 October 2023 05:18 GMT: **“ Hamas says it has launched military operation against Israel**

The leader of Hamas’s military wing says the group has launched a new operation against Israel.

In a rare public statement, Mohammed Deif said that 5,000 rockets had been fired into Israel early Saturday to begin “Operation Al-Aqsa Storm”. Israel also reported an infiltration from Gaza.

“We’ve decided to say enough is enough,” Deif said as he urged all Palestinians to

confront Israel.” — [Aljazeera](#)

7 October 2023 05:23 GMT: “An Israeli woman has been killed by a rocket fired from Gaza, Israel ambulance service says.” — [Aljazeera](#)

7 October 2023 0:5:26 GMT: “**start of Operation Al-Aqsa Flood** Here are some more lines by the statement of Mohammed Deif, head of the al-Qassam Brigades, the military wing of Hamas:

“We have already warned the enemy before. The occupation committed hundreds of massacres against civilians. Hundreds of martyrs and wounded died this year due to the crimes of the occupation.

“We announce the start of Operation Al-Aqsa Flood, and we announce that the first strike, which targeted enemy positions, airports, and military fortifications, exceeded 5,000 missiles and shells.” ” — [Aljazeera](#)



A building is ablaze following rocket attacks from the Gaza Strip, in Tel Aviv, Israel October 7, 2023. [Itai Ron/Reuters]

7 October 2023 05:27 GMT: “The Israeli army sounded sirens in Jerusalem after a barrage of rockets was fired from the blockaded Gaza Strip into Israel, AFP journalists have reported.” — [Aljazeera](#)

7 October 2023 05:27 GMT: “**huge surprise**

Speaking to Al Jazeera from Jaffa, Tel Aviv, a reporter from Israeli daily Haaretz said the Gaza rocket fire was a “huge surprise for the people here in Tel Aviv”.

“What most Israelis are worried about now is not only the missiles but also penetration of a terrorism of Hamas fighters into Israeli settlement. Everybody here is pretty surprised at the moment,” he said.

“For most Israelis this comes as a huge shock. It’s a holiday, Shabbat day. People don’t go to work, schools are closed. Even the TV channels are trying to wake up and realise it is a whole different reality,” he explained.

He added that he expects a strong and harsh response from the Israeli government and military.” —[Aljazeera](#)

7 October 2023 0:53 GMT: “The Israeli army says, “Israelis across the country Ⓓ on Shabbat and the holiday of Simchat Torah Ⓓ woke up to sirens sounding and Hamas firing rockets at them from Gaza this morning.

“We will defend ourselves,” says a post by the army on social media platform X.” —[Aljazeera](#)

7 October 2023 17:29 GMT: “Turn off the enemy now!

“This day is our Pearl Harbor.

“We will still learn the lessons.

“Right now, one goal: Nakba!

“A Nakba that will overshadow the Nakba of 48.

“Nakba in Gaza and Nakba to anyone who dares to join!

“their Nakba, because like then in 1948, the alternative is clear.

“Because there is no turning back, and there is no other way,

“There is no nation that will withdraw from the pits of its life

“May God protect the security forces.

“Netzah Israel will not lie!” —Ariel Kalliner, member of Knesset, screenshot reported by [Eyes on the Right](#)

7 October 2023: “Prime Minister Netanyahu, Finish them. Finish them. Hamas did this, you know Iran’s behind it. Finish them. They should have hell to pay for what they’ve just done.” —[Nikki Haley, former US ambassador to the UN, in interview with Fox News](#)

7 October 2023: “There is no such thing as Palestine. It’s always been a figment of the imagination of Islamic terrorists and Jew haters. Israel belongs to the Jews.

For the sake of humanity and what is righteous and good in the war on evil, Israel must level GAZA, flatten it into a parking lot, and then glass it.

The one state solution doesn’t include a world or a scenario where Israelis can coexist with HAMAS ANIMALS and their sympathesizers. They must be shown through IDF force that they don’t exist, and their pretend homeland doesn’t exist. We will not recognize these animals and the entire world must unite in rejecting them and denying them any sense of dignity.” —Laura Loomer [deleted tweet]

9 October 2023: Israel cuts the main drinking water supply to Gaza, causing a severe shortage of drinking water for more than 650,000 people.

9 October 2023: “We are imposing a complete siege on Gaza. There will be no electricity, no food, no water, no fuel. Everything will be closed. We are fighting

human animals and we act accordingly.” —Israeli Defense Minister Yoav Gallant
[Huffington Post](#)

9 October 2023: “Defense Minister Gallant’s statements are abhorrent. Depriving the population in an occupied territory of food and electricity is collective punishment, which is a war crime, as is using starvation as a weapon of war. The International Criminal Court should take note of this call to commit a war crime.” —Omar Shakir, Israel and Palestine director at Human Rights Watch [Huffington Post](#)

10 October 2023: “We are dropping hundreds of tons of bombs on Gaza. The focus is on destruction, not accuracy.” —Daniel Hagari, Israeli Army spokesman quoted in the *Haaretz* newspaper [503i7](#)

9 October 2023: “Flatten everyting. Spare no school, no children’s hospital, no old-age home. Delete their entire gene pool off the face of the earth.” —@Yakovolf in deleted tweet



10 October 2023: “*Statement by Martin Griffiths, Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, about the situation in Israel and the Occupied Palestinian Territory*

The scale and speed of what’s unfolding in the Occupied Palestinian Territory and Israel is bone-chilling.

Hundreds of Israelis have been killed and thousands have been injured. Scores are being held captive, facing appalling threats to their lives. Thousands of indiscriminate rockets have been launched into Israel.

In densely populated Gaza, hundreds of Palestinians have been killed and thousands have been injured in intense bombing. Homes, health centers and schools

sheltering displaced families have been hit. The whole city is now under a siege order.

My message to all sides is unequivocal: The laws of war must be upheld.

Those held captive must be treated humanely. Hostages must be released without delay.

Throughout hostilities, civilians and civilian infrastructure must be protected. Civilians must be allowed to leave for safer areas.

And humanitarian relief and vital services and supplies to Gaza must not be blocked.

The whole region is at a tipping point.

The violence must stop.” —[UN Office of the Coordination of Humanitarian Affairs](#)

10 October 2023: “Last post on this topic to answer all the questions I’ve been asked over and over today

1. It is stunning to me how little most people know about the treatment of the Palestinian people. Over 2 million people packed into 140 square miles in Gaza. Robbed of their land and housing over and over. We’re talking real David VS Goliath sh*t here. David has been taking Ls for years. They are very desperate.

2. What Hamas did is pure evil. Those responsible deserve whatever is coming for them. That does not justify atrocities against non-combatants. 50% of the Gaza population are kids. No joke. Remember that when you talk about turning it into glass.

3. If you are unaware of item 1 above then you probably think their hatred of Israel is based entirely on religious dogma. It’s not. They are in an open-air prison with over 50% unemployment. They are destitute.

4. Israel provides water, food and electricity to the Palestinians for the same reason Rikers Island does: control over the prison population. Don’t take my word for it, look into it. It’s awful. Calling it charity is a really twisted way of viewing things

5. I’m not going to pretend to know what the long term solution for peace is. After the attacks by Hamas, I fear their fates are sealed. The IDF is likely going to flatten Gaza killing an insane amount of innocent people and displacing a million more. I have no clue where they will go.

6. I will never celebrate the death of innocents. To the thousands of people that have responded to me, describing paelestinians, including the over 1 million KIDS, as subhuman and worse: you’re sick. You need help. You make me fear for humanity’s future. Sincerely.

7. I am still very suspect that the IDF allowed for this attack to justify what comes next. Idk for sure, no one does, but they need to answer for that security failure. It makes no sense.

8. I have nothing but love for the Palestinian and Israeli people. For their governments, not so much.

9. Above all I am a non-interventionist. America cannot win a world war. No one can as it’ll likely go nuclear. But America is in steep decline and this would be the end. I pray it can be avoided. This can escalate out of control so insanely fast given that there are 4-5 potential fronts already on the table. It risks the end of all life on earth, no exaggeration. People are way too flippant about what’s happening.

10. Iran uses Palestine as a proxy. Israel attacks Iran at will. The CIA attacks every one of their neighbors. Islam does have a problem with radicalism. That radicalism is also understandable given what has been done to them. My belief is that the US needs to STOP intervening and let them all sort it out. Israel also has a problem with a supremacy worldview paired with a martyrdom complex. That complex is also understandable given what they've had to live thru.

In short, everyone has some valid justifications for their actions. Also, everyone involved has committed heinous acts. It requires our better nature to shine thru if there is to ever be a lasting peace. Forgiveness is probably not on the table but dear god do we need to seek it. That is all I've tried to call for today...

Peace and non-intervention
and if you're religious: prayer

Love to everyone in harms way including my Israeli and Palestinian brothers. May you walk in God's path and not one of vengeance.

Lastly, the political class in America is undoubtedly going to capitalize on this trauma. They are going to use your sympathy to strip you of further liberty. Reject it. They will use your better nature to justify further bloodshed. Reject it. Do not trust them. The war on terror should've taught us all that lesson, please remember what they did to you when you were at your lowest. These people are evil.

Good night" — [Liberty Lockdown w/ Clint Russell](#)

10 October 2023: "Waving Palestinian flag may be a criminal offence, Braverman tells police. Home secretary also suggests clampdown on pro-Arab chants in letter that will concern free speech advocates." — [the Millennial Snowflake](#)

10 October 2023: "From June 2021: The new discoveries of oil and natural gas in the Levant Basin (Palestine), amounting to 122 trillion cubic feet of natural gas at a net value of \$453 billion (in 2017 prices) and 1.7 billion barrels of recoverable oil at a net value of about \$71 billion" — [Stephanie Voltolin](#) source: [UNCTAD: The Economic Costs of the Israeli Occupation for the Palestinian People: The Unrealized Oil and Natural Gas Potential](#)

11 October 2023: **"Israeli official calls for 'doomsday' nuclear strike on Gaza that will 'shake Middle East'**

Right-wing Israeli lawmaker Revital "Tally" Gotliv called for the use of "doomsday" force in Gaza after Hamas launched a terrorist attack that killed at least 1,200 Israelis.

An Israeli lawmaker has called for a nuclear strike in the Gaza Strip after Hamas launched a massive terrorist attack over the weekend.

Revital "Tally" Gotliv, a member of the right-wing Likud party in Israel's Parliament the Knesset, has called on social media for Gaza to be wiped off the map.

Israel has the most formidable military in the Middle East and is widely thought to be a nuclear power possessing as many as 400 nuclear weapons. Israel's Government does not openly comment on its nuclear program but several politicians have alluded

to the weapons in the past.

Since Saturday, when Hamas launched a ruthless attack that killed at least 1,200 Israelis including women and children, Israel has declared war on the terrorist group and promised widespread destruction in Gaza. Preparations for a ground invasion appear to be underway.

In one message posted to Twitter in Hebrew, Gotliv said: “Jericho Missile! Jericho Missile! Strategic alert. Before considering the introduction of forces. Domsday weapon! This is my opinion. May God preserve all our strength.”

Jericho missiles are a family of ballistic missiles developed by Israel in the 1960s. Gotliv urged the IDF to “shell Gaza mercilessly!”

She added: “Only an explosion that shakes the Middle East will restore this country’s dignity, strength and security. I urge you to do everything and use Domsday weapons fearlessly against our enemies.”

She said destroying neighborhoods in the Gaza Strip would not be enough adding the Israeli Government must “crush” the enclave home to 2.2 million people.

Following the attack by Hamas, Israel’s Armed Forces have launched hundreds of airstrikes dropping entire apartment blocks the IDF says were linked to Hamas.

Now, around 300,000 Israeli reservists have massed at the Gaza border along with artillery, tanks and infantry fighting vehicles in what appears to be preparation for a ground offensive.Ê

Israel’s Defense Minister has ordered a “complete siege” of Gaza blocking food shipments, water and fuel from entering the area governed by Hamas.

There have been reports that Gaza’s only domestic power station is on the brink of running out of fuel which would leave Gaza in darkness.

While at least 1,200 on the Israeli side have been confirmed dead, Palestinian authorities say more than 1,050 have been killed in Gaza. Dozens of hostages, including foreigners, have been taken by Hamas.” —Matthew Dooley, [Daily Express US](#)

11 October 2023: “US Senator Lindsey Graham: “We are fighting a religious war, and I’m on Israel’s side. Do whatever it takes. Raze this place to the ground”.

Another call for genocide from a politician of one of the biggest superpowers, the US.

There are thousands of children there.

Every American should be ashamed of this mistake of the nature.” —[Megatron](#)

11 October 2023: “In a historic, impassioned speech expressing unbridled U.S. support for Israel on Tuesday, President Joe Biden listed among the atrocities Hamas had committed that women “were raped, assaulted, paraded as trophies.”

A White House spokesperson told the *Forward* that this assertion was based on a phone call earlier that day in which Prime Minister Benjamin Netanyahu had told Biden that Israeli women had been “brutally raped and murdered.” Similar characterizations have been included in condemnations of Hamas by columnists, celebrities and editorial boards.

But the source of the rape allegation remains murky. While sexual assault is a common feature of violent conflict worldwide, the Israel Defense Forces told the *Forward* Tuesday night that it does not yet have any evidence of rape having occurred during Saturday's attack or its aftermath. And most mainstream media outlets have avoided mention of rape, with the *Los Angeles Times* and NBC News specifically stating they have been unable to verify the claims.

"It's important to distinguish between claims that are false and claims that are not verified yet," noted David Broniatowski, an expert on social media at George Washington University. "If what you conclude is, 'Well I'm not sure, this is unverified,' think about the social consequences of sharing."

Disinformation experts have criticized X, the website formerly known as Twitter, for failing to moderate content about the conflict, including allowing graphic videos of the Hamas attack to circulate over the weekend.

A White House official said Wednesday morning that Biden had based his comments off both his phone call with Netanyahu and an article in *The Times of Israel* that referenced videos circulating on social media that "have raised concerns of sexual assault against women." The official, speaking on the condition of anonymity, noted that the president had described the rape allegations as "stomach-turning reports," not verified facts.

"These are people, as you've been reporting and others have seen, that deliberately targeted teenage girls, women and children, the elderly, not just for rape and murder but then dumping their bodies off on the streets of Gaza," Sen. Marco Rubio, a Florida Republican, said Monday on CNN. "Just horrifying things."

Meanwhile, the *Los Angeles Times* removed references to rape from a column published Monday, adding a note that said "such reports have not been substantiated." And when NBC News posted a video of Netanyahu stating that women had been raped, it superimposed a disclaimer stating that it had not confirmed his assertion.

The author of the *Times* column, Jonah Goldberg, did not respond to a request for comment Wednesday. A spokesperson for the newspaper, Hillary Manning, said, "We don't wish to comment beyond what is stated in the correction."

Asked about the rape allegations following Netanyahu's remarks, an IDF spokesperson said, "We can't officially confirm any of that yet."

The reports of sexual assault appear to have several roots amid the scattered media accounts of the violent chaos in southern Israel after Hamas militants breached the border fence in a surprise attack that killed more than 1,200 Israelis.

Liel Leibovitz, a right-wing columnist for the online Jewish magazine *Tablet*, published an article Sunday based on interviews with unnamed survivors of the Hamas massacre at the desert music festival near the Gaza border. Emergency responders estimated that more than 200 young people were killed there and an untold number kidnapped.

"Women have been raped at the area of the rave next to their friends' bodies, dead bodies," Leibovitz quoted one attendee saying. The person did not say they had witnessed these incidents, and at one point was recounting videos they had seen on

social media.

“Several of these rape victims appear to have been later executed,” Leibovitz wrote, without citing a specific source. “Others were taken to Gaza. In photographs released online, you can see several paraded through the city’s streets, blood gushing from between their legs.”

The *Tablet* article did not, however, include specific photos. Two videos circulating online over the weekend were also being used as evidence of sexual assault, although neither precisely matched Leibovitz’s description.” —[Forward](#)

12 October 2023: “ “Level the place” —Lindsey Graham

“Finish them” —Nikki Haley

“We must provide Israel with whatever it needs” —RFK Jr.

“I... have confirmed pics of terrorists beheading children” —Joe Biden (lied)

This genocidal “leadership”. Period.” —[StopCopCity](#)

12 October 2023: “Wow. A massive demonstration in solidarity with Palestine is currently taking place in Paris, France.

People are challenging Macron’s ban on pro-Palestinian protests by chanting:

“Nous sommes tous des Palestiniens!” (We are all Palestinians!)” —[sarah](#)

12 October 2023: “Israeli Energy Minister Katz says “No electrical switch will be turned on, no water hydrant will be opened and no fuel truck will enter until the Israeli abductees are returned home” ” —[Ali Velshi](#)

12 October 2023: “Former Israeli PM Bennett was asked: “What about the babies in incubators in Gaza who had their life support turned off because the Israelis cut off the power?”

His answer: “Are you seriously asking about Palestinian civilians? What’s wrong with you?” ” —[Jackson Hinkle](#)

12 October 2023: “Crazy how last week Israel had no idea what Hamas was up to and this week they know every hospital, mosque and school Hamas is hiding in.”

—[Caitlin Johnstone](#)

12 October 2023: “The Israeli air force has dropped 6000 bombs in Gaza in 6 days. About 1600 killed, out of which 500 are children, 276 are women. Close to 100 taken hostage, more than 3000 injured being treated in hospitals amid power blackouts, supplies running out. Full support from the world” —[Rana Ayyub](#)

12 October 2023: “In the immediate aftermath of horror, we need voices for de-escalation and peace.

Instead, our political leaders have given the green light for the annihilation of Gaza.

We may be witnessing the beginning of the total annihilation of Gaza and its people. This is not a battle between one state and another. It is couched as an Israeli response to a non-state actor, but in fact it is a response to Palestinian people wherever

they are. What is unfolding is not a conflict of equals, but the systematic starvation, subjugation and destruction of an unarmed civilian population.

I wonder, if Gaza is wiped off the face of the earth, whether our politicians will look back and reflect on the reality of their unwavering support. If they had any integrity, they would mourn the innocent Palestinian lives that have been erased in the name of self-defense. They should be ashamed of their cowardice, knowing that others will pay the price for the war crimes they refuse to oppose.” — [Jeremy Corbyn](#)

12 October 2023: “BREAKING: Israel has used white phosphorus in military operations in Gaza and Lebanon, putting civilians at risk of serious and long-term injuries.

White phosphorus causes excruciating burns and can set homes afire. Its use in populated areas is unlawful.” — [Human Rights Watch](#), article at [Israel: White Phosphorus Used in Gaza, Lebanon; Use in Populated Areas Poses Grave Risks to Civilians](#)



12 October 2023: “As a Jewish person, I wish I could spend this week grieving and

mourning. But the Israeli government is weaponizing our grief to enact a second Nakba, killing thousands and displacing millions. I can make time to grieve while also working to stop ethnic cleansing.” —[Yonah Lieberman](#)

12 October 2023: “The United Nations World Food Program says supplies are running dangerously low in the Gaza Strip after Israel imposed a total blockade on the territory following deadly Hamas attacks.” —CBS News

12 October 2023: Israel launched missile strikes against Syria’s two main airports in Damascus and Aleppo, knocking out service in both. This is Syria, not Gaza.

13 October 2023: “SCOOP: MSNBC has quietly taken three of its Muslim broadcasters out of the anchor’s chair since Hamas’s attack on Israel last Saturday amid America’s wave of sympathy for Israeli terror victims, @maxwelltani| reports.

Some staff at MSNBC have been concerned by the moves, feeling the hosts — Mehdi Hasan, Ayman Mohyeldin, and Ali Velshi — have some of the deepest knowledge of the conflict.

NBC says the shifts are coincidental, and the three continue to appear on air to report and provide analysis.” —[Semafor](#)

13 October 2023: “Joe Biden lied, again, to fuel another war” —[Amazon Piss Jugs](#)

President Joe Biden speaks during an event to announce new cabinet nominations at the Queen Theatre in Wilmington, Delaware. —Ali Abunimah

No, it turns out, Biden did not see photos of beheaded babies —Ali Abunimah

This atrocity propaganda is designed to justify genocide.—Ali Abunimah

13 October 2023: “It is an entire nation out there that is responsible.” “There are no innocent civilians in gaza.” —Israeli President Isaac Herzog following Israel’s order that 1.1 million Palestinians abandon their homes.

13 October 2023: “Negotiating with killers is not an option.” “My view is: One side is guilty, and it’s not Israel.” —former US president George W. Bush

13 October 2023: Joe Biden’s administration ordered State Department diplomats to make sure they don’t use the phrases “de-escalation/ceasefire,” “end to violence/bloodshed” and “restoring calm.”

“The revelation provides a stunning signal about the Biden administration’s reluctance to push for Israeli restraint as the close U.S. partner expands the offensive it launched” —Huffington Post writer Akbar Shahid Ahmed

“The emails were sent hours after Israel told more than 1.1 million residents of northern Gaza that they should leave their homes and shelters ahead of an expected ground invasion of the region. On Thursday, the United Nations said Israel had given Gazans a 24-hour deadline to move to the south of the strip, and warned that it would be “impossible for such a movement to take place without devastating humanitarian consequences.” ” —Huffington Post writer Akbar Shahid Ahmed

“Israel’s operation in Gaza has killed nearly 1,800 people so far, the Gazan Health Ministry said Friday, including 583 children and 351 women. U.S. officials believe there are 500 to 600 American citizens in the area. Israel has repeatedly bombed the exit point from Gaza that does not lead into its territory.” —Huffington Post writer Akbar Shahid Ahmed

—[Israel: Huffington Post](#)

13 October 2023: “Earlier today, it was reported that Al Durrah Children’s Hospital had to be evacuated because the Israeli military had bombed it with white phosphorus, and now Israel is threatening to bomb Al Awda Hospital too.

The war crimes are endless.” —[Solo Monk](#)

13 October 2023: “Berlin’s public prosecutor’s office will now classify the phrase, “From the river to the sea, Palestine will be free,” as a criminal offense” —[Max Blumenthal](#)

Quoted from the [Frankfurter Allgemeine](#):

In view of the terrorist attack on Israel, the Berlin public prosecutor’s office and police want to take stricter action against anti-Israel slogans at demonstrations by palestinian groups. The use of the oft-used slogan “From the River to the Sea, Palestine will be free” is now being classified as a criminal offense by the public prosecutor’s office, a police spokeswoman told the German Press Agency on Friday. The sentence means that there should be a free Palestine in an area from the Jordan River to the Mediterranean – where Israel is now located. During demonstrations, corresponding maps show the area completely green, the color of Islam.

The public prosecutor’s office sees the slogan as an initial suspicion of sedition because it affects Israel’s right to exist, said the spokeswoman. The corresponding paragraph 130 states that anyone who incites hatred or calls for violence or arbitrary measures against “national, racial, religious or ethnic groups” will be punished. Slogans such as “Death to the Jews” have long been banned under the law. Other slogans that attack Israel, however, are permitted as expressions of opinion.

13 October 2023 [unconfirmed]: “I am proceeding cautiously because of what @charliekirk11 describes here.

The Israel-Gaza border is one of the most secure borders on the planet, Israel/US have some of the best intelligence on the planet, Iron Dome went down, and Israel were warned an attack might happen.

Combine this with how quickly Israel escalated and seemingly eager to remove not just Hamas, but the entire Palestinian population from Gaza.

Israeli intelligence also seem to be back working all the sudden after ignoring warnings from Egypt and failing to stop the Hamas attacks. They went from not having any idea what’s going on, to dropping air strikes all over supposed Hamas positions, taking out over 1,900 Palestinian civilians along the way (according to UN).

Cui bono? Who stands to gain from this? Certainly not Hamas or Palestine. But Israel now have the unwavering support to bomb Palestine, Syria, Lebanon, civilians,

whatever the hell they want. If Israel wanted an excuse to take control of Palestinian land, it would behoove them to let an attack like this happen.

Same concept as 9/11.

Then you take into account the already massive amounts of atrocity propaganda. The beheading babies hoax significantly influenced the emotions of the world, and helped Israel convince the public that their coming response is justified, no matter how many civilians they killed with collateral damage. They have convinced much of the American public that all Palestinians are subhuman savages that deserve to be exterminated, even the children. All based on WILDLY exaggerated claims that have since been debunked. But the damage is already done.

All of these happenings are the textbook precursors to genocide, and it appears that it has already begun, and many Americans are cheering it on.

Yes, Hamas terrorists killed civilians, but if you think the story stops there, you haven't been paying attention.” —[Clandetine](#)

13 October 2023 (in response to Reuters reporting “Reuters journalist killed in Lebanon in missile fire from direction of Israel”): “from direction of Israel

Joe Biden led the way for all the Zionists who have responded to this with “journalism is a risky business!” No, they fucking TARGETED the clearly marked, highly visible reporters there, you don't get to say “yeah it's a dangerous neighborhood” after you shoot someone dead!!

They target journalists as a warning to other journalists not to do their jobs. They do it so the world doesn't see what they are doing, which is transparently evil. Fuck anybody making excuses for this war crime. Israel has killed a dozen journalists just this week.” —[they/them might be giasnts](#)

13 October 2023: “Israel told Palestinians to flee their homes to another part of the Gaza Strip (they can't leave Gaza because Israel has closed all its borders). Israel told Palestinians which roads were safe.

Then Israel bombed those roads while civilians were fleeing. An act of genocide.” —[Yonah Lieberman](#)

[MSNBC](#): 70 killed after Israeli strikes hit three convoys of evacuees trying to leave northern Gaza.

13 October 2023: “Another journalist friend in Gaza says most Palestinians don't want to flee because they don't want a repeat of 1948 Nakba, they would rather die in their homes. All displaced people have nowhere to go but into the streets, waiting to be killed” —[Abby Martin](#)

13 October 2023: “To be perfectly clear, the US government is just as culpable for everything that happens in Gaza as the Israeli government. It's being done with US weapons, US funding and US consent. Washington could end this with a word, and instead the US State Department is telling its staff not to advocate de-escalation or ceasefire. Israel's crimes are not meaningfully separate from the crimes of the US war

machine.” —[Caitlin Johnstone](#)

13 October 2023: “The order to evacuate 1.1 million people from northern Gaza defies the rules of war and basic humanity.

Gaza is under intense bombardment. Roads and homes have been reduced to rubble. There is nowhere safe to go.

Forcing scared and traumatized civilians, including women and children, to move from one densely populated area to another, without even a pause in the fighting and without humanitarian support, is dangerous and outrageous.

Without safe passage and access to basic services, such mass displacement of civilians will have catastrophic humanitarian consequences and long-term implications.” —[Martin Griffiths](#) (the official Twitter account of the UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator)

14 October 2023: “In one week: Israel has killed 2,215 Palestinians in Gaza, including 724 children, and wounded 8,714, including 2,450 children, according to Gaza health ministry. Nearly one million have been displaced according to UN.”

—[Sharif Kouddous](#)

14 October 2023: Worldwide boycott of McDonald’s starts after it was reported that McDonald’s gave thousands of free meals to Israeli soldiers.

14 October 2023: “Israel scenes of jubilation and nauseating singing: “Gaza! Gaza! Gaza is a cemetery. No more school for children because there are no more children in Gaza. Your species is exterminated!”

Never in my life have I seen such despicable evil.” —[Dr. Anastasia Maria Loupis](#); tweet includes video

14 October 2023 (responding to Israeli President Isaac Herzog’s claim that “there are no innocent civilians in Gaza”): “44% of the 2 MILLION civilians in Gaza are 14 years old or younger.” —[Jackson Hinkle](#)

14 October 2023: “Meta has deleted the largest Palestinian news page Quds News Network after operating for 10 years.

Remember when they did this to Russia at the start of the Ukraine war?” —[Jackson Hinkle](#)

14 October 2023: “Biden has given the “Green Light” to Israel to conduct any operation which they deem necessary in order to “confront any threat, on any front, in any geography.”

Major war crimes incoming...” —[Jackson Hinkle](#)

14 October 2023: “The Israeli military’s recent offensive on the ancient and historically significant city of Aleppo in Syria represents an egregious transgression against international norms and human heritage. Aleppo, revered as one of the world’s

oldest continuously inhabited cities, possesses a rich tapestry of cultural, architectural, and historical significance that transcends national boundaries. The repercussions of such actions are manifold, as this indiscriminate bombing not only exacerbates regional instability but also threatens to obliterate invaluable heritage, diminish cultural diversity, and deepen hostilities in an already volatile region. A more prudent course of action, rooted in diplomacy and respect for international law, should be sought to avert further devastation and promote the preservation of our shared human heritage.” —[Amazon Guy](#)

14 October 2023: “BREAKING: Israel is currently bombing 3 different countries simultaneously: Palestine, Lebanon and Syria.

Only Israel can commit war crimes like these with total impunity, and still be portrayed as the victim in Western media.” —[sarah](#)

14 October 2023: “In 2018 the CIA along with Islamist militants faked an illegal gas attack in Syria

They used the attack to try and pressure Trump to overthrow Assad

Trump bombed Syria but decided against a full on invasion

At the time I didn't understand how overthrowing the Syrian government benefited America but now it's become clear it wasn't for American interests ” —[Jake Shields](#)

14 October 2023: “MEDIA MANIPULATION: THE TOP IMAGE IS A PALESTINIAN FLAG THE BOTTOM IMAGE IS THE HAMAS FLAG

THEY have made you believe that the Palestinian Flag is the Hamas Flag

They have manipulated you

The reason is so that they can say that supporting the Palestinian people is supporting Hamas.

This is so they can stop people supporting Palestine.

So that they can criminalise it

So that they can end free speech

Welcome to 1984” —[Sulaiman Ahmed](#)



14 October 2023: “After all the talk about beheaded babies, I can now sadly confirm that I have seen proof that a baby was beheaded today... in Gaza by an Israeli bomb.” —[Jackson Hinkle](#)

14 October 2023: **“It’s been a dreadful week. Humanity must prevail.**
Statement by Martin Griffiths, Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator, about the latest in Israel, the Occupied Palestinian Territory and the region

Civilians in Israel and the Occupied Palestinian Territory are suffering from a week of utter anguish and devastation. I fear that the worst is yet to come.

In Israel, families are reeling from the horror of last Saturday's attack. More than a thousand people have been killed and many more have been injured. Over 100 people are held captive.

In Gaza, families have been bombed while inching their way south along congested, damaged roads, following an evacuation order that left hundreds of thousands of people scrambling for safety but with nowhere to go.

Nearly 2,000 people have been killed and many more have been injured.

There is no power, no water and no fuel. Food supplies are running dangerously low.

Hospitals, overwhelmed with patients, are running out of medicine.

Morgues are overflowing.

Homes, schools, shelters, health centers and places of worship are under intense bombardment.

Entire residential neighbourhoods have been razed to the ground.

Aid workers have been killed.

The humanitarian situation in Gaza, already critical, is fast becoming untenable.

In the West Bank, violence is on the rise, with a surge in civilian deaths and injuries. Families are facing ever greater movement restrictions.

And in Lebanon, the risk of the conflict spilling into the country is a major concern.

The parties' actions and rhetoric over the past few days are extremely alarming and unacceptable.

Even wars have rules, and these rules must be upheld, at all times, and by all sides.

Civilians and civilian infrastructure, including humanitarian workers and assets, must be protected.

Civilians must be allowed to leave for safer areas. And whether they move or stay, constant care must be taken to spare them.

Essential supplies and services and unimpeded humanitarian access must be allowed.

Anyone held captive must be treated humanely. All hostages must be released.

All countries with influence must exert it to ensure respect for the rules of war and to avoid any further escalation and spillover.

The past week has been a test for humanity, and humanity is failing.” —[Martin Griffiths](#), The official Twitter account of the UN Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator

14 October 2023: “4 out of 5 Jewish Israelis believe that Netanyahu and his government are to blame for last week's Hamas attack. - *The Jerusalem Post*” —[Jackson Hinkle](#)

14 October 2023: Israel launched missile strikes against the runways at Aleppo airport in Syria, claiming they are targeting Iranian arms shipments that they claim will arm Hamas.

14 October 2023: Israel delays the ground invasion of Gaza for several days. The official reason for the delay is heavy rain.

14 October 2023: “Across the Gaza Strip, more than 2 million people are at risk as water runs out.

“It has become a matter of life and death. It is a must; fuel needs to be delivered now into Gaza to make water available for 2 million people,” said Philippe Lazzarini, UNRWA Commissioner-General.

No humanitarian supplies have been allowed into Gaza for a week now.

Clean water is running out in the Gaza Strip, after its water plant and public water networks stopped working. People are now forced to use dirty water from wells, increasing risks of waterborne diseases. Gaza has also been under an electricity blackout since 11 October, impacting the water supply.

At the UN base in the southern Gaza Strip - where UNRWA has moved its operations- drinking water is also running out. Thousands of people have sought refuge there after Israel issued a warning to residents demanding them to leave their homes in the northern parts of the Strip.

Only in the past 12 hours, hundreds of thousands of people have been displaced. The exodus continues as people move to the southern parts of the Gaza Strip. Nearly 1 million people have been displaced in one week alone.

“We need to truck fuel into Gaza now. Fuel is the only way for people to have safe drinking water. If not, people will start dying of severe dehydration, among them young children, the elderly and women. Water is now the last remaining lifeline. I appeal for the siege on humanitarian assistance to be lifted now,” added Lazzarini.”

—[United Nations Relief and Works Agency for Palestine Refugees in the Near East](#)

14 October 2023: “Humans can only survive without water for about 3 days. Gaza has run dry.

The blockade on water, food, and electricity is an indiscriminate, collective punishment and a crime.

It is cruel and unjust. To save millions of people in Gaza - nearly half children - it must end. Now.” —[Alexandria Ocasio-Cortez](#)

14 October 2023: “There is gas on the coast of Gaza. According to a news article⁵, there is a natural gas field called Gaza Marine that lies about 30 kilometers west of the Gaza coast. It was discovered in 2000 by British Gas and is estimated to contain more than 1 trillion cubic feet of natural gas⁵. However, the extraction of this gas has been delayed due to political and security reasons, as well as disputes between Israel and the Palestinian Authority over the ownership and revenue sharing of the gas⁵.

There is also another gas field near Gaza, called Tamar, that is located off the coast of Israel. It is run by US energy company Chevron and supplies 70% of Israel’s energy needs for power generation⁴. However, this gas field was shut down on Monday (October 9, 2023) by Israel’s Ministry of Energy due to safety concerns amid the

ongoing conflict with Hamas⁴. This could affect the gas exports from Israel to its neighbors Egypt and Jordan, as well as the global gas market^{4 2}.

Source: Conversation with Bing, 10/15/2023

- (1) Egypt persuades Israel to extract Gaza's natural gas. [Al-Monitor](#)
- (2) Israel just shut a gas field near Gaza. Here's why that matters. [CNN](#)
- (3) Israel shuts major offshore gas field near Gaza: Will this drive up... [Forst Post](#)
- (4) Israel just shut a gas field near Gaza. Here's why that matters. [Microsoft Start](#)
- (5) UK oil and gas price spike as Gaza conflict leaves markets 'on edge'. [Microsoft Start](#)" —[DD Geopolitics](#)

15 October 2023: "Biden insists US can confront wars in both Ukraine and Israel: 'Most powerful nation in history.' " —*New York Post*

15 October 2023: "Israel's reaction went beyond self-defense and the collective punishment of the residents of the Gaza Strip should stop." —Chinese Foreign Ministry

16 October 2023: "From 2014: WikiLeaks documents show that Israel was interested in empowering Hamas in attempt to end the first Intifada - Hamas "serves as a useful counter-force" Link: [Jeruslam Online](#)" —[WikiLeaks](#)

16 October 2023: "How do we know more than 250 Israelis were killed at a music festival?

Zaka, an Israeli search/rescue organization, said so.

Zaka also allegedly defrauded the Israeli government by drastically inflating the number of volunteers they had to get more money.

Could they have inflated numbers here as well?" —[503i7](#)

16 October 2023: "It's worked for 75 years

Zionists had to realize that using calling people antisemitic as a weapon to shut them up for not supporting their stealing Palestinian land and forcing them to live under apartheid was gonna start to lose its effectiveness at some point." —[Black in the Empire](#)

16 October 2023: "Ben Saphiro is calling for a genocide of 1 million little children in Gaza while calling others "antisemites"." —[Dr, Anastasia Maria Loupis](#)

16 October 2023: "BREAKING:

U.S. Secretary of State, Antony Blinken and Members of the Israeli War Cabinet are currently in a Bomb Shelter beneath Tel Aviv due to the ongoing Rocket Attack on the City." —[Megatron](#)

16 October 2023: "We're the most powerful nation in the history of the world. We can take care of Israel and Ukraine and still maintain our overall international defense." —[Joe Biden](#)

16 October 2023: “We can certainly afford two wars.” —Janet Yellen

16 October 2023: “BREAKING: Israel is currently dropping bombs on Syria (Damascus), Gaza and South Lebanon.

Israel has also attacked Egypt (Rafah) earlier today.

Only Israel can bomb 4 different countries in a single day, and the “international community” won’t even blink.” —[sarah](#)

16 October 2023: “BREAKING: Colombia has expelled the Israeli ambassador in response to the genocide being committed in Gaza.” —[sarah](#)

16 October 2023: “Colombia has EXPELLED the Israeli ambassador and told the ambassador to “apologize and leave the country.”

“If we have to suspend foreign relations with Israel, we will suspend them. We do not support genocides. The president of Colombia will not be insulted.” ” —[Jackson Hinkle](#)

16 October 2023: “ “Not a drop of water, not a grain of wheat, or a liter of fuel was allowed to enter the Gaza Strip during the past eight days.” - United Nations” —[Jackson Hinkle](#)

16 October 2023: “A guy stole my phone. Wasn’t sure where he was staying so I had to set fire to the entire neighborhood. A lot of people died, but it’s his fault for being where noncombatants are. He was using his neighbors as human shields. He is 100% responsible for their deaths, not me.” —[Caitlin Johnstone](#)

16 October 2023: “According to WSJ, The US military has selected roughly 2,000 troops to prepare for a potential deployment to invade Gaza in support of Israel.” —[Quds News Network](#)

16 October 2023: “Update now from Gaza: “The situation is the same, they massacre people all day, bombing buildings w/ residents inside killing dozens. Still no food, water, electricity, fuel allowed in. The night is like hell, they choose night to conduct carpet bombings. They are starting now.” ” —[Abby Martin](#)

16 October 2023: “Breaking: Israel has again ordered staff at the Kuwaiti hospital in Gaza to abandon their patients or face the consequences.

“We will not leave the hospitalDexcept to heaven,” said the hospital director.

Sirens blare to show the doctors haven’t left.” —[Alan MacLeod](#); tweet includes video

16 October 2023: “United Nations Office for the Coordination of Humanitarian Affairs (OCHA) states: “Israel is purposely targeting every aspect of life for Palestinians from health sector where it targeted 24 health facilities included 6 hospitals, to 309 educational facilities and PA schools.”

“Access to water was among the primary targets not only by shutting down the water supply to Gaza... but by targeting and damaging water wells, water pumping stations, and desalination plant serving 1 million Palestinians”

“The internally displaced population in Gaza is reported at 600,000 as of 15th October (OCHA) yet they reported that the number might be much larger than that.” ”
—[William Lafi Youmans](#)

16 October 2023: “Egyptian media are reporting that Israel has bombed the Rafah crossing for a 4th time. This happened while international efforts were intensifying to get aid into Gaza and help stranded dual nationals out. Thousands have begun to take refuge in and around the crossing ” —[Ayman](#)

16 October 2023: “Just so we’re clear: this is blatant racism.” —[Nina Turner](#)
deleted text from the Prime Minister of Israel:

This is a struggle between the children of light and the children of darkness, between humanity and the law of the jungle.



17 October 2023: “Dear world,
Israel just bombed a Christian hospital in Gaza and murdered over 500 Palestinian civilians. White phosphorus chemical bombs confirmed by human rights watch was

not enough to open your eyes. Over 1000 dead children wasn't enough. Will you open your eyes and act now?" —[Dr. Omar Suleiman](#)

NOTE: Israel and US President Joe Biden are falsely claiming that the al-Ahli Hospital was destroyed by a mis-fired Hamas rocket.



17 October 2023: “An Israeli air strike killed at least 300 people at a Gaza City hospital on Tuesday, authorities in the Palestinian enclave said, and the United Nations said an Israeli strike also hit one of its schools being used as a shelter.

A Gaza civil defence chief said on Al-Jazeera television that more than 300 people were killed at Al-Ahli al-Arabi Hospital. A Gaza Health Ministry source said at least

500 people were killed. Both departments are under the Hamas-run government.

Canadian Prime Minister Justin Trudeau said, "It's not acceptable to hit a hospital". Egypt said it denounced the attack "in the strongest terms" — [Reuters](#)

NOTE: Israel and US President Joe Biden are falsely claiming that the al-Ahli Hospital was destroyed by a mis-fired Hamas rocket.

17 October 2023: Both US President Joe Biden and German Chancellor Olaf Schoiz are visiting Israel with the expressed intent to show solidarity with carpet bombing Gaza and targeting hospitals.

17 October 2023: "In this now deleted tweet from @HananyaNaftali a spokesperson for Israel, Israel first took credit for bombing the Baptist Hospital. Once they saw how many civilians it killed, he deleted his tweet & blamed the attack on Hamas & said Hamas bombed the hospital" — [Nostalgic](#)

TEXT FROM Israeli spokesperson:

BREAKING: Israeli Air Force struck a Hamas terrorist base inside a hospital in Gaza.

A multiple number of terrorists are dead.

It's heartbreaking that Hamas is launching rockets from hospitals, Mosques, schools, and using civilians as human shields.



Hananya Naftali ✓
@HananyaNaftali

BREAKING: Israeli Air Force struck a Hamas terrorist base inside a hospital in Gaza.

A multiple number of terrorists are dead.

It's heartbreaking that Hamas is launching rockets from hospitals, Mosques, schools, and using civilians as human shields. [#Hamas_Is_ISIS](#)



17 October 2023: “Israel just bombed the last remaining Christian hospital in Gaza, the Al-Ahli National Baptist Hospital.

More than 500 Palestinians killed — children, doctors, hundreds of patients and refugees.

How can anyone call this “self-defense”?” — [sarah](#)

NOTE: Israel and US President Joe Biden are falsely claiming that the al-Ahli Hospital was destroyed by a mis-fired Hamas rocket.

17 October 2023: “Israel blows up a Gaza hospital and uses 2022 video, to say it was a Hamas accident. This stuff writes itself.” — [Princess Mat Waldie](#)

17 October 2023: “Israel literally said to evacuate the hospital because they were going to bomb it, then they bomb the hospital and have the audacity to claim it was a

misfired rocket from Hamas? And people believe this shit? Come the fuck on.”

—[cabral](#)

17 October 2023: “PROOF that Israel BOMBED the Gaza Hospital:

Listen for yourself:

- 1st clip is the sound of a tiny Hamas rocket
- 2nd clip is the sound of a JDAM Bomb
- 3rd clip is the sound of what hit the Gaza Hospital

If it was a JDAM, it was 100% Israel.” —[Jackson Hinkle](#); tweet includes video

17 October 2023: “Israel bombed the US embassy in Egypt and blamed in on the Muslim brotherhood so I’m sure they wouldn’t lie about bombing a Hospital

Look up the Lavon affair if you think I’m lying ” —[Jake Shields](#)

17 October 2023: “I will never forget that the White House called those seeking a ceasefire “repugnant” ; and banned diplomats from calling for an end to bloodshed.”

—[Krystal Ball](#)

17 October 2023: “Breaking: Israel has hit one of the last functioning bakeries in the Middle/Southern parts of the Gaza Strip, Nuseirat area.

Several reported killed and injured in the massacre.

This is where Israel wants people to move to.

At home no household can make bread now for lack of electricity, cooking gas, and flour.

This bakery destroyed in Nuseirat Refugee Camp feeds hundreds of families and evacuees.

This is genocide and an attempt to starve Palestinians in Gaza.” —[Refaat](#)



17 October 2023: “Nothing can justify striking a hospital.

Nothing can justify targeting civilians.

France condemns the attack on the Al-Ahli Arab hospital in Gaza, which made so many Palestinian victims. Our thoughts are with them. All the light must be shed on the circumstances.” — [French President Emmanuel Macron](#)

17 October 2023: “Humanitarian access to the Gaza Strip must be opened back without delay.” — [French President Emmanuel Macron](#)

17 October 2023: “Murdering innocent people to avenge the murder of innocent people is not justice.

The murderous extremists running Israel and the murderous extremists in Hamas are on the same side.

Escalation of death is their only answer.

This isn't a war anyone can win.

There is no final death that will solve it.

The extremists grow stronger with each dying child.

Each bomb is a recruitment tool.

I'm not an expert but I have visited the area and talked to the people.

I don't think this is a fight between equal parties. I could (and I have in the past) argue for who I think is more right and who is more wrong.

But I don't think that leads anywhere productive.

I do think anger and fear and hate isn't a solution. I do think revenge is a path to destruction.

There are people in the replies saying I should pick a side and I understand what

they are saying.

But I think peace is the only side. That forgiveness is the only answer.

Maybe that's a cop-out. I know I thought it was in the past.

Maybe it's weakness. But I don't think more strength is what the world needs.

I don't see a point in being right when people keep dying.

I have the luxury of distance. I haven't lost friends and family in this war.

I probably wouldn't have the same feelings if I had.

But I understand anger. And fear. And hate. I understand wanting to kill someone that killed someone I love.

I have those feelings.

And in another life I probably would have acted on them.

I'm not religious but I know most religions did find the only answer forward through forgiveness.

Not because it's easy. Or fair. But because it's the only solution.

And I know all of this sounds trite and stupid to a lot of people.

I know I used to think so too.

And maybe I'll think so again.

But for now this is where I'm trying to live." —[Halli](#)

17 October 2023: "So, to recap: The West has proclaimed that Israel has a right to self-defense within the boundaries of international law.

Israel has [repeatedly] violated international law.

The West has pledged to support Israel regardless." —[The Millenial Snowflake](#)

18 October 2023: "In the United States terrorism can practically be defined as things they do to us that we don't like, and any violence committed against the enemy by the United States, Israel and any other US ally is counter terrorism, regardless if that act blows up a hospital or kills children" —[MC Squared](#)

18 October 2023 The United States vetoes the UN Security Council resolution on Gaza and Israel.

Voting favor (12): Albania, Brazil, China, Ecuador, France, Gabon, Ghana, Japan, Malta, Mozambique, Switzerland, UAE

Voting against (1): United States

Abstain (2): Russia, UK

Russia's delegate to the United Nations said that the nations opposing their draft resolution for a cease fire in Gaza bear responsibility for the continued deaths.

18 October 2023: "Now is not the time to talk about a ceasefire. We must support Israel in efforts to eliminate the Hamas terrorists who slaughtered innocent men, women, and children.

Hamas does not want peace, they want to destroy Israel. We can talk about a ceasefire after Hamas is neutralized.

In the meantime, I look forward to working with my colleagues in the Senate to

quickly deliver the aid our ally Israel needs. This includes confirming ambassador-nominee Jack Lew as soon as possible.” —[Senator John Fetterman](#)

18 October 2023: “The Truth behind Biden’s Visit, the Hospital Massacre, and Biden’s Lie:

1. Hezbollah and Iran stated that unless Israeli attacks on civilians ceased, they would intervene;
2. Israel panicked. It can carry out massacres of defenseless populations but it can’t fight ground wars. It has dreaded a ground war in Gaza, let alone fighting the Party of God;
3. Israel begged Biden to visit to protect it from a second-front war;
4. When Israel carried out the hospital massacre, Biden agreed to lie about the attack only if Israel agreed to cease its genocidal plan in Gaza and allow in humanitarian aid;
5. Biden lied exactly as Lyndon Baines Johnson lied in June 1967 when Israel attacked the U.S.S. Liberty, killing 34 American crewmen. Both LBJ and Biden lied to protect a key ally (and, not incidentally, a domestic electoral asset).
6. Biden will now be praised for his statesmanship in standing by Israel and enabling humanitarian aid to enter Gaza.” —[Norman Finkelstein](#)

19 October 2023: “Israel Police: Anti-war protesters will be sent to Gaza
Israeli police chief says there’s a ‘zero tolerance’ police for anti-war protests, threatening to send them to Gaza in buses.” —[Middle East Monitor](#) [includes video]

transcript of above video: “We are in a state of war. For us the orders are clear, zero tolerance for any instance of incitement by a nurse or a doctor or singer. There will be no authorisation for protests. The major general here has proven he is upholding this with an iron fist. We’re not in a situation where we will allow all sorts of people to come and test us. And this means we must fix the problem in a serious manner and without being lenient. Whoever wants to become an Israeli citizen, welcome. Anyone who wants to identify with Gaza is welcome. I will put him on buses heading there now.” —Yaakov ‘Kobi’ Shabtai, Israeli Police Commissioner

19 October 2023: “Total Devastation: Images of survivors picking through the rubble of the Saint Porphyrius Church in Gaza, the world’s 3rd oldest Christian building.

Four Israeli missiles hit the building tonight.

Church authorities estimate there are already 150 dead.” —[Alan MacLeod](#)
[includes video]

NOTE: Israel supporters are actively denying that the church was attacked.

19 October 2023: “BREAKING: Israeli Foreign Minister Eli Cohen calls to annex Gaza. “At the end of this war, not only will Hamas no longer be in Gaza, the territory of Gaza will also decrease.” Many have asked: Where will this end? Now we know.”

—[David Adler](#)

19 October 2023: “There is no humanitarian crisis in Gaza.” —Tzipi Hotovely, Israeli ambassador to the UK, Sky News

19 October 2023: “There were many, many civilians [that] got attacked from your attacks on German cities. Dresden was a symbol, but you attacked Hamburg, you attacked other cities, and altogether it was over 600,000 civilian Germans that got killed. Was it worth it in order to defeat Nazi Germany? And the answer was yes.” —Tzipi Hotovely, Israeli ambassador to the UK, TV interview with Piers Morgan

19 October 2023: “Ah ok, the people who spent 20 years searching for fake WMDs in Iraq have reviewed the evidence and decided Palestinians bombed their own hospital” —[Deus Ex Moniker](#)

19 October 2023: “BREAKING: President Gustavo Petro says that Colombia will open an embassy in Ramallah, Palestine, and send aid to Gaza’s borders to await the opening of a humanitarian corridor.” —[Pawel Wargan](#)

19 October 2023: “Russia on Thursday sent 27 tonnes of humanitarian aid for civilians in the Gaza Strip to be transported from Egypt, Moscow’s emergency situations ministry said.

“A special plane has taken off from the airport at Ramenskoye near Moscow for El-Arish in Egypt. The Russian humanitarian aid will be handed over to the Egyptian Red Crescent to be sent to the Gaza Strip,” deputy minister Ilya Denisov said in a statement.

Denisov said the aid comprised “wheat, sugar, rice (and) pasta”.” —[NDTV World](#)

19 October 2023: The US Senate votes 97-0 to pass a resolution affirming their support for Israel, its right to self-defense and condemning Hamas’s attacks on civilians.

The resolution “condemns Iran’s support for global terrorism, including its support for terrorist groups such as Hamas and Palestinian Islamic Jihad,” and adds that the US “stands ready to assist Israel with emergency resupply or other security, diplomatic, and intelligence support needs,”

Senate Majority Leader Chuck Schumer claimed, “October 7, 2023, will go down as a day of infamy. And as Israel faces the darkest hour of its 75 year history, the bipartisan resolution we are about to vote on proclaims that as long as there is a United States of America. ... The people of Israel will never stand alone. We stand firmly with Israel and her right to defend herself. ... We condemn the heinous, vicious attacks by the terrorist group Hamas. It is rare that all 100 senators agree on everything. But every one of the hundred of us is here today, united saying we are behind Israel.”

19 October 2023: Greta Thunberg posted this image on Instagram:



gretathunberg

...



20 October 2023: “Whoever identifies with Greta [Thunberg] in any way in the future, in my view, is a terror supporter. Because what Greta is doing, that she is now showing solidarity with Gaza while not saying a word about the massacres of Israelis, shows that she is actually not in favor of the Palestinians, but that she is sweeping the terror of the Palestinians or Hamas and Islamic Jihad under the table as if it did not exist.” —Arye Sharuz Shalicar, spokesman for the Israeli army

20 October 2023: “Finish them.

We have three priorities when we look at Israel: Support Israel with whatever they need whenever they need it. Eliminate Hamas, not weaken them — eliminate Hamas. And do everything we can to bring our hostages home.

But let me tell you what I told the Biden administration today: Don’t fall for it. ... They are doing this to earn favor with America because they want to try and look good in the eyes of America. Don’t fall for it.

Don’t ever let America be so arrogant to think that we don’t need friends. We need friends. We needed them on September 11. We may need them again. Let’s have the right friends.

We’ve got to be smart, and we’ve got to be ready. I’m tired of talking about a

Department of Defense. I want a Department of Offense. Every enemy needs to fear us.” —Nikki Haley as reported by the [Iowa Capital Dispatch](#); video at [Nikki Haley, former US ambassador to the UN, in interview with Fox News](#)

21 October 2023: “I support the complete destruction of GAZA.

They have had more than enough time to evacuate.

Palestinian terror must come to an end.

I support the actions taken by Israel of cutting off water, electricity, and food aid to GAZA.

I 100% support this. Just so we are clear.” —Laura Loomer in deleted tweet



[why one Democrat calsl for voting for Biden] 27 October 2023: “Biden is supporting a genocide

However, you should still vote for him. Trump would have been cheering for Gaza to be flattened and turned into his new personal golf course. Democrats are still vastly better than Republicans and it’s not even close” —[theana](#)

28 October 2023: “5,000 US troops involved in Gaza offensive D media Israel’s ground operation in Gaza is supported by 5,000 US troops, Tasnim has reported” —[RT](#)

28 October 2023: “Netanyahu declaring invasion: “You must remember what Amalek has done to you, says our Holy Bible”

1 Samuel 15:3

“Now go and smite Amalek, and utterly destroy all that they have, and spare them not; but slay both man and woman, infant and suckling, ox and sheep, camel and ass”
 ” — [Michael Tracey](#)

28 October 2023: “There’s obviously the question of why this evacuation order is delivered to Gazans in English, over an internet they now can’t use.

But the bigger point: why would anyone believe this “relocation” is “temporary” when key Israelis believe the W. Bank and Gaza should be annexed?” — [Glenn Greenwald](#)

29 October 2023: “Verified leaked video of Netanyahu.

“Turn off the cameras so we can discuss this”

“They asked me before the election if I’d honor [the Oslo accords]...I said I would, but ... I’m going to interpret the accords in such a way that would allow me to put an end to this galloping forward to the ’67 borders. How did we do it? Nobody said what defined military zones were. Defined military zones are security zones; as far as I’m concerned, the entire Jordan Valley is a defined military zone. Go argue.”

“The main thing is, first of all, to strike them (Palestinians) hard. Not once, but several times, they need suffer so painfully that the price they pay will be unbearable. A large-scale attack on the Palestinian Authority to the point where they’re afraid that everything is about to collapse. A fear that everything will collapse. That is what we need to achieve.”

[Reporter] “Aren’t you afraid that the world will call us occupiers?”

“The world won’t say a thing. The world will say we are defending ourselves.”

[Reporter] “Aren’t you afraid of the world, Bibi?”

“No. Especially today with the US. I know how they are. America is very easy to influence. America is a thing you can move very easily, move it in the right direction. They say they’re for us, but, it’s like They won’t get in our way.

[Reporter] “What if America does say something after all?”

“So then they say something, so what? 80% of the Americans support us. It’s absurd. We have a lot of support there.” —Netanyahu reported by [Kim Iversen](#); video at [roo7yn](#)

29 October 2023: “With the blood of 30 million indigenous people and 55 million Africans on its hands, it comes as no surprise that America’s propaganda machine has convinced people that genocide and ethnic cleansing are justified.” — [Bishop Talbert Swan](#)

29 October 2023: “BREAKING: Israel’s ambassador to the UN says that ‘every honest country should defund the United Nations until the bias stops and the antisemitism stops’.” — [The Spectator Index](#)

30 October 2023: “People who are calling for a ceasefire now, do not understand Hamas. That is not possible.

It would be such a gift to Hamas because they would spend whatever time there was a ceasefire in effect rebuilding their, uh, armaments, you know, creating strong positions, to be able to fend off, a, an eventual, um, assault by the Israelis.” —Hillary Clinton as quoted by [The Jerusalem Post](#); video at [Sprinter](#)

31 October 2023: “It became evident to U.S> officials that Israeli leaders believed mass civilian casualties were an acceptable price in the military campaign. In private conversations with American counterparts, Israeli officials referred to how the United States and other allied powers resorted to devastating bombings in Germany and Japan during World War II — including the dropping of the two atomic warheads in Hiroshima and Nagasaki — to try to defeat those countries.” —*New York Times* as quoted by [Johnny Akzam](#) [My note:] The fire bombing of both Dresden and Tokyo were international war crimes. The US broke the Japanese code and Truman knew that the Japanese government was preparing to surrender, but decided to use the atomic bombs anyway to send a message to the Soviet Union, an ally in that war. These are examples of horrific war crimes.

27 October 2023: Moussa Abu Marzouk, a member of Hamas’s political bureau, was interviewed on Russia Today’s Arabic channel.

The Israeli government and press are claiming “Top Hamas official declares group is not responsible for defending Gazan civilians” and “Moussa Abu Marzouk says vast underground tunnel network is for the protection of the terror group’s members [or sometimes they just say “terrorists”], while civilians should be taken care of by the UN and Israel”.

It may come as no surprise to those who aren’t Israeli that Marzouk didn’t actually call Hamas terrorists or the terror group.

So, what did Marzouk actually say?

“We built the tunnels because we have no other way of protecting ourselves from being killed in airstrikes. We are fighting from inside the tunnels.”

“Everybody knows that 75% of the people in the Gaza Strip are refugees, and it is the responsibility of the United Nations to protect them.”

It is true that conditions imposed by the government of Israel on Gaza have required international refugee aid for Palestinians be provided by the UNRWA since 1 May 1950 (Israel claims that the war started for no reason at all on 7 October 2023).

“According to the Geneva Convention, it is the responsibility of the occupation to provide them with all the services as long as they are under occupation.”

It is true that international law requires that an occupying military provide essential services to the civilians.

1 November 2023: Comment by Galit Distel Atbaryan, who resigned from the position of Public Diplomacy Minister on 13 October 2023. She remains member of the Knesset for the Likud.

“The screening of the “film”.

The same uncensored film that journalists have already been exposed to.

Today was the turn of the members of the Knesset.
The Knesset doctor stands outside the hall and offers sedatives before viewing.
I have never taken such a pill.
Today I took without thinking twice.
Amir Ohana says a few words before the screening, mainly warning us not to reveal any concrete information from the film.
I held out in the hall for five minutes.
Then I ran away crying and shaking.
Yes, a tranquilizer, not a tranquilizer - I'm writing you the following words out of an anxiety attack I've never experienced before:
Don't hate each other.
The monsters hate you enough.
Hate the enemy.
Hate the monsters.
Any vestige of internal bickering is a maddeningly stupid waste of energy.
Invest this energy in one thing;
Erasing all of Gaza from the face of the earth.
That the Gazan monsters will fly to the southern fence and try to enter Egyptian territory.
or they will die.
And their death is evil.
Gaza should be erased.
And fire and smoke on the heads of the Nazis in Judea and Samaria.
Haron is also a Jew who will shake the earth of the world.
A vengeful and cruel IDF is needed here.
Anything less is immoral.
Just unethical." —[Galit Distel Atbaryan](#)



1 November 2023: “Israel’s Public Diplomacy Minister:

“Erase all of Gaza from the face of the earth. That the Gazan monsters will fly to the southern fence & try to enter Egyptian territory or they will die & their death will be evil.

Gaza should be erased!”

Still questioning a genocidal intent?” — [Muhammad Shehada](#)

3 November 2023: “From the river to the sea is an aspirational call for freedom, human rights, and peaceful coexistence, not death, destruction, or hate. My work and advocacy is always centered in justice and dignity for all people no matter faith or ethnicity.” — [Rashida Tlaib](#)

4 November 2023: “The Israeli Minister of Heritage, Amichai Eliyahu, who is also a member of the Otzma Yehudit party, said the northern Strip has no right to exist, adding that anyone waving a Palestinian or Hamas flag “shouldn’t continue living on the face of the earth.”

Regarding allowing humanitarian aid into Gaza, he said “we wouldn’t hand the Nazis humanitarian aid,” adding that “there is no such thing as uninvolved civilians in Gaza.”

He also believes that one of the options in the war in Gaza is to drop a nuclear bomb on the Gaza Strip, as reported by Hebrew media.

He supports occupying Gaza and establishing settlements there, saying Palestinians residing in the Strip “can go to Ireland or deserts, the monsters in Gaza should find a solution by themselves.” — [Roya News](#)

5 November 2023: “BREAKING: Israeli Minister of Heritage Amihai Eliyahu says

that dropping an atomic weapon on Gaza is ‘one of the possible options’ ” —[The Spectator Index](#)

5 November 2023: “Turkiye orders its ambassador to leave Isrel and return home. Chile orders its ambassador in Israel to come home.

Oman issues law prohibiting Israeli planes to fly over its airspace.

Honduras orders its ambassador to return home from Israel because of genocide in Gaza.

Jordan orders its ambassador to return home from Israel.

Chad orders its ambassador to return home from Israel, Making it the first African nation to take this measure.

China removes Israel from its online maps.” —[Dark Warlord](#)

6 November 2023: “The ten dumbest things we're being asked to believe about Gaza:

1. That Israel had no idea what Hamas was up to prior to October 7, but ever since October 7 has known about every hospital, mosque, school, refugee camp and water tower that Hamas is hiding in.

2. That the blame for all of the deaths caused by Israeli weapons launched by Israel rests solely on Hamas.

3. That Hamas is using “human shields”—meaning Hamas bases are hidden amidst civilian populations—yet Israel is managing to kill thousands of civilians without doing any meaningful damage to Hamas.

4. That it would be perfectly fine to murder children by the thousands even if they were being used as “human shields”—as though resolving a hostage situation by mowing down thousands of child hostages would be regarded as reasonable and acceptable by the public if it happened in our own country.

5. That is is only by pure coincidence that Israel bombing “Hamas targets” in civilian infrastructure and residential buildings just so happens to look exactly the same as what you’d expect to see if Israel was simply bombing civilian infrastructure and residential buildings and lying about its reasons for doing so.

6. That satellite images of entire neighborhoods reduced to rubble in Gaza have been caused by “precision strikes” directed solely at Hamas and have been carried out with the greatest of care for human life, despite Israeli officials openly saying that “the emphasis is on damage and not on accuracy” in this assault and that “Gaza will eventually turn into a city of tents; there will be no buildings.”

7. That this bombing campaign has anything to do with freeing Israeli hostages—as though the bombing campaign itself has not killed dozens of hostages, and as though anyone believes Israel would stop bombing Gaza after the hostages are returned.

8. That the only reason anyone could possibly oppose the detonation of thousands of bombs on an open air prison full of children would be if they had very strong and hateful opinions toward the members of the religion of Judaism.

9. That Hamas attacked Israel entirely out of the blue and completely unprovoked, solely because they are evil and hate Jews.

10. That Washington is powerless to stop this genocide that it is directly funding and supplying.” —[Caitlin Johnstone](#)

8 November 2023: “Things that are not antisemitic:

Calling for a ceasefire

Demanding an end to occupation

Demanding an end to apartheid

Things that are Islamophobic:

Calling all Gazans terrorists

Calling them human shields

Calling them animals

Calling a mass expulsion a “Humanitarian Corridor” ” —[Professor Anthony Zenkus](#)

8 November 2023: “Israelis deeply believe we’re the chosen people and if we are the chosen people we can do what we like to the Palestinians we present ourselves as the victims we don’t believe the Palestinians are human or equal to us.” —[Gideon Levy, columnist, Israeli daily Haaretz](#) [video]

9 November 2023: “Netanyahu rejected ceasefire-for-hostages deal in Gaza, sources say.

Israeli PM said to have turned down proposal in early talks and continues to take tough line.

Benjamin Netanyahu rejected a deal for a five-day ceasefire with Palestinian militant groups in Gaza in return for the release of some of the hostages held in the territory early in the war, according to sources familiar with the negotiations.

The sources said the Israeli prime minister rejected the deal outright in negotiations soon after Hamas militants staged an unprecedented incursion into Israeli territory on 7 October, killing an estimated 1,400 people.

Negotiations resumed after the launch of the Israeli ground offensive on 27 October, but the same sources said Netanyahu had continued to take a tough line on proposals involving ceasefires of different durations in exchange for a varying number of hostages.

Others indicated that negotiations which took place prior to the ground invasion involved a far larger number of hostages, with Hamas proposing the release of dozens of foreign nationals captive in Gaza.

An estimated 240 people were taken hostage after fighters from Hamas, Palestinian Islamic Jihad and other groups based in Gaza, as well as civilians, crossed the reinforced border fence separating the territory from Israeli towns and kibbutzim.

Public anger and demands that Israel prioritise hostage negotiations have increased, with families of those held in Gaza rallying outside Netanyahu’s residence earlier this week.

According to three sources familiar with the talks, the original deal on the table

involved freeing children, women and elderly and sick people in exchange for a five-day ceasefire, but the Israeli government turned this down and demonstrated its rejection with the launch of the ground offensive.

Israeli bombardments as well as a continuing ground invasion of the northern end of the Gaza Strip, home to 2.3 million people, have killed more than 10,300 people in the past month and injured in excess of 25,000, according to the Hamas-run health ministry. Abu Obeida, the spokesperson for Hamas's militant wing, Izz ad-Din al-Qassam, has said that the group is unable to release more hostages amid the mounting attacks.

Lt Col Richard Hecht, an Israeli army spokesperson, said: "There's no ceasefire, I repeat there's no ceasefire. What we are doing, that four-hour window, these are tactical, local pauses for humanitarian aid."

Palestinian Islamic Jihad released a video it said showed two hostages, a woman in her 70s and a 13-year-old boy, held in Gaza. A spokesperson for the group's military wing said it was "ready to release them on humanitarian grounds when the security conditions on the ground are met". Hecht said the footage amounted to "psychological terrorism of the worst kind I've seen in my life".

Indirect negotiations between Israeli officials and Hamas, mediated by Qatar as the two groups do not officially have contact, have recently focused on the possibility of a ceasefire lasting between one and three days, tied to the release of between 10 and 15 hostages.

A source with knowledge of the negotiations said the push to cease hostilities for a short time and exchange a small number of hostages was a litmus test and a gateway to further hostage talks.

One source with knowledge of the talks, which slowed after the Israeli ground invasion, said a central point of discussion was a demand by the Israeli side for Hamas to provide a full list specifying the name and details of each person held in Gaza. The Israeli side was unwilling to cease bombardments without receiving this list.

Hamas responded that it was unable to provide the list without a pause in the fighting, as the estimated 240 hostages were held by a number of different groups in places across Gaza. That suggested even Hamas leaders do not know for sure how many people are held captive, their locations or the number who have survived the bombardments.

Another source said Hamas originally demanded prisoner exchanges, fuel and other supplies in return for the hostages, but these demands were dropped in favour of a halt to the airstrikes alone.

"Each time the Israeli counter-demand got harder," the source said. Members of Hamas have previously said they took hostages in order to exchange them for the thousands of Palestinian prisoners held in Israeli jails.

The negotiations have also brought splits inside the Israeli establishment to the fore, pitting hawks in the military, government rightwingers, and particularly Netanyahu, against the Mossad intelligence agency, which is the lead agency in hostage negotiations, and some of the generals.

“Each time a deal would go back to Bibi [Netanyahu] it would come back with tougher demands,” one source said. Netanyahu has repeatedly publicly rejected any idea of a ceasefire, and has instead opted to intensify attacks on Gaza.

Talks have focused on attempts to find figures within the Israeli camp who are receptive to the argument that further hostage releases would be impossible amid an escalation in the fighting.” —[Ruth Michaelson in Istanbul, Julian Borger in London and Emine Sinmaz in Jerusalem](#) *The Guardian*

9 November 2023: “Just now, Biden again endorsed Israel’s bombing campaign that has killed 4,000 children in Gaza.

Reporter: “Are the retaliatory strikes working?”

Biden: “Yes.”

“They’re working in the sense that they’re hitting the targets they’re seeking.” This is a genocide.” —[Anrew Damon](#) [video]

10 November 2023: “Many United Nations workers in Gaza are themselves members of Hamas. The time has come to bust the myth of UN supplied facts.” —[Gilad Erdan, Permanent Representative of Israel to the United Nations](#) [video]

10 November 2023: “One person killed, many children wounded after Israeli snipers target al-Quds hospital, according to Palestinian Red Crescent

The **Red Cross** statement calling for the protection of patients, healthcare workers, medical facilities in Gaza comes as the **Palestinian Red Crescent Society (PCRS)** said Israeli forces opened fire on the intensive care unit at **al-Quds hospital in Gaza City**.

One person was killed and 28 others were wounded in sniper fire by Israeli forces at the hospital, the organisation said.

The majority of the injured were children, it said, two of whom are in critical condition.” —[the Guardian](#)

10 November 2023: “Rabbi Meir Maroz to Israeli Channel 7: “If they [people of Gaza] were humans, we would have sent them humanitarian aid...but this is about animals.” ” —[Quds News Network](#)



11 November 2023: “The ruling class is not getting it. The antisemitic hustle to give cover to Israeli fascism is not being brought folks. You went too far this time.” —[Ajamu Baraka](#)

11 November 2023: “#Breaking: Ben Gvir: “When we say that #Hamas must be eliminated, we mean leaders, supporters, and even those who distribute sweets, they are all terrorists.” ” —[Quds News Network](#)

11 November 2023: “Israeli Minister of Defense Yoav Gallant declared it in no uncertain terms on October 9th: ‘We are imposing a complete siege on Gaza. No electricity, no food, no water, no fuel. Everything is closed. We are fighting human animals, and we will act accordingly’.” —[Jasmin Marsters](#)

12 November 2023: “The call to arrest Netanyahu does not go far enough. Biden & all the officials that enable the criminals in Israel to effect the war crimes we are witnessing in Gaza should be arrested, taken to court & convicted.” —[Ajamu Baraka](#)

13 November 2023: “BREAKING: Israel’s finance minister says the voluntary migration of the people of Gaza to the countries of the world is ‘the humanitarian solution’ ” —[The Spectator Index](#)

14 November 2023: “Our soldiers discipline human animals to perform the Zionist national anthem and stand in respect of the anthem.” —[Edy Cohen](#) [video included]

15 November 2023: “Remember when Bibi used the word Amalek recently? Most people wouldn’t know what that means. I didn’t until I saw the Rabbis explain. Listen while the Rabbis explain what this means to Jewish people. When Bibi used the word,

it was certainly a dog-whistle with implications.

Amalek means wipe out/kill all Amalek and their descendants including children. Christian Bible: Exodus 17:14 and Deuteronomy 25:17” — [This Nonsense Will End Commies](#) [includes video]

15 November 2023: “You have aa circumstance where the first war crime is being committed by Hamas by having their headquarters, their military, under a hospital. And that’s a fact. That’s what happened.

Hamas has already said publicly that they plan on attacking Israel again, like they did before cutting babies’ heads off and burning women and children alive. And so the idea that they’re just gonna stop and not do anything is not realistic.” —Joe Biden speaking to reporters after meeting with Xi Jinping at the Filoli Historic House and Garden in Woodside, California, about 35 miles south of San Francisco

15 November 2023: “The occupation forces distributed new leaflets east of Khan Yunis, urging the population to evacuate. #Israel

Concerns arise as previous evacuations forced a large number of people from the north to the south, raising fears of potential forced displacement towards Egypt by Israeli intentions. #Gaza” — [Quds News Network](#)

15 November 2023: “BREAKING: *Reuters* reports that Iran’s Supreme Leader told Hamas chief during their meeting earlier this month, ‘You gave us no warning of your October 7 attack on Israel and we will not enter the war on your behalf.’ ” — [The Spectator Index](#)

15 November 2023: “BREAKING: The IDF says it found weapons inside the Shifa Hospital’s MRI center” — [The Spectator Index](#)

My comment: The magnetic strength of an MRI, dangerous in a 10 meter radius sphere, would have exploded the grenades the IDF showed in their video and probably would have torn apart the rifles and laptop computer, depending on how close they were supposed to have been. And the laptop computer would not be able to be turned on, much less show a bunch of absurd documents.

15 November 2023: “BREAKING: Israel’s foreign ministry says there is ‘no room for extended humanitarian pauses as long as 239 hostages are still in the hands of Hamas terrorists’ ” — [The Spectator Index](#)

My comment: How many civilians, including children, need to be killed before Israelis will consider peace?

15 November 2023: “BREAKING: Turkey’s foreign ministry says Israeli officials ‘have entered the dark pages of history with the oppression and massacres committed against the Palestinian people’ and ‘have already lost their legitimacy in the conscience of humanity’ ” — [The Spectator Index](#)

My comment: When a human rights violator as bad as Turkey thinks you are bad, you are pretty damned bad.

15 November 2023: “BREAKING: For the first time since the start of the conflict, Israel’s opposition leader Yair Lapid calls on Netanyahu to resign, saying ‘Netanyahu needs to go now during the fighting’.” —[The Spectator Index](#)

15 November 2023: “BREAKING: President Biden says Hamas has ‘headquarters, weapons, material’ below Shifa Hospital” —[The Spectator Index](#)

My comment: Says the guy who cheated in law school.

15 November 2023: “BREAKING: Saudi Arabia says it ‘strongly condemns’ the storming of Shifa Hospital, calls for international accountability over ‘ongoing and brutal violations’.” —[The Spectator Index](#)

16 November 2023: “BREAKING: Israel’s defense minister says ‘we have completed the capture and clearing of the entire western part of Gaza City’ and that the ‘next stage has begun’ ” —[The Spectator Index](#)

16 November 2023: “BREAKING: Reports that bulldozers are destroying southern parts of Shifa Hospital complex” —[The Spectator Index](#)

16 November 2023: “BREAKING: Red Crescent says that al-Ahli hospital is now being surrounded by tanks” —[The Spectator Index](#)

16 November 2023: “BREAKING: Hamas-run government office says that the Israeli military has turned Shifa Hospital into a ‘military barracks’ ” —[The Spectator Index](#)

16 November 2023: “BREAKING: The UAE says it will set up three water desalination plants in the Gaza Strip” —[The Spectator Index](#)

16 November 2023: “BREAKING: France’s foreign minister expresses ‘strongest condemnation by France of the violence carried out by the settlers against the Palestinians’ in the West Bank” —[The Spectator Index](#)

16 November 2023: “BREAKING: Jordan’s foreign minister says that Israel is committing ‘war crimes’ and ‘pushing the region towards hell’ ” —[The Spectator Index](#)

16 November 2023: “BREAKING: Jordan’s foreign minister says his country will not sign a water and energy exchange deal with Israel” —[The Spectator Index](#)

16 November 2023: “BREAKING: Norway's parliament passes bill asking the government to ‘be ready to recognize Palestine as an independent state when recognition could have a positive impact on the peace process’ ” —[The Spectator Index](#)

16 November 2023: “BREAKING: *The Financial Times* reports that the Israeli military is planning operations in southern Gaza” — [The Spectator Index](#)

16 November 2023: “BREAKING: IDF Chief of Staff says the military is close to eliminating Hamas’s military system in northern Gaza” — [The Spectator Index](#)

16 November 2023: “BREAKING: UN agency says Gaza civilians face an ‘immediate possibility of starvation’ ” — [The Spectator Index](#)

16 November 2023: “BREAKING: South Africa’s ruling African National Congress party says it will support a parliamentary motion for the Israeli embassy to be closed and diplomatic relations suspended.” — [The Spectator Index](#)

16 November 2023: “BREAKING: UN Relief and Works Agency says ‘there will not be a cross-border aid operation at the Rafah Crossing tomorrow’ and that communications are down because there is ‘no fuel’ which ‘makes it impossible to manage or coordinate humanitarian aid convoys’.” — [The Spectator Index](#)

16 November 2023: “BREAKING: *Bloomberg* reports that the US and its European allies are ‘pushing a plan to deploy an international peacekeeping force in the Gaza Strip after the war’ ” — [The Spectator Index](#)

16 November 2023: “BREAKING: IDF reports finding ‘operational tunnel shaft’ in Shifa Hospital complex” — [The Spectator Index](#)

17 November 2023: “All the preoccupation with whether or not there is internet in Gaza shows that we have learned nothing, We are too humane.

Burn Gaza now no less!” —Nissim Vaturi, screenshot reported by [Comrade Misty is Putin’s Buddy](#)

17 November 2023: “BREAKING: 18 people killed in new strikes on Jabalia refugee camp” — [The Spectator Index](#)

17 November 2023: “BREAKING: Israeli National Security Council chairman Tzachi Hanegbi says ‘We will not stop until all Hamas and Palestinian Islamic Jihad military and leadership capabilities are eradicated’ ” — [The Spectator Index](#)

17 November 2023: “BREAKING: Red Crescent says ‘emergency medical teams remain besieged at Al-Ahli Baptist Hospital’ and that tanks are stationed in the ‘hospital’s vicinity, amidst heavy gunfire’.” — [The Spectator Index](#)

17 November 2023: “The Palestine Red Crescent Society announced on Thursday that Israeli tanks are besieging Al-Ahli Baptist Hospital in the Gaza City, and its ambulance teams are unable to reach the injured people due to the intense clashes.’ ” — [Aryan Pandey](#)

17 November 2023: “BREAKING: Prosecutor of the International Criminal Court says his office has received a referral from five countries - South Africa, Bangladesh, Bolivia, Comoros, and Djibouti - regarding the ‘situation in the State of Palestine’.” —[The Spectator Index](#)

17 November 2024: “On 17 November 2023, South Africa referred the situation in the State of Palestine to the Office of the Prosecutor (OTP) of the International Criminal Court (ICC), pursuant to Article 14 of the Rome Statute. The referral was delivered in person by South Africa’s ambassador in the Hague, His Excellency Mr Vusi Madonsela.

The Palestine situation was referred by the State of Palestine in 2018 and the Prosecutor of the ICC opened an investigation in 2021 after Pre-Trial Chamber I of the ICC confirmed that the territorial jurisdiction of the situation includes Gaza and the West Bank, as well as East Jerusalem. This is after a number of countries sought to block the referral by the Palestinian Authority by challenging the court’s jurisdiction with regards to the situation in Palestine.

This investigation is ongoing, and the prosecutor, Mr Karim A.A. Khan has confirmed that Rome Statute crimes committed since 7 October 2023 form part of the OTP’s investigation.

South Africa, along with like-minded States Parties, i.e., Bangladesh, Bolivia, Venezuela, Comoros and Djibouti, as state parties to the Rome Statute, submitted a joint referral of the situation in Palestine to ensure that the ICC pays urgent attention to the grave situation in Palestine and thereby, lending their support to the Prosecutor’s investigation. Venezuela will petition the court in writing to join the submission.

South Africa is further encouraging other States Parties to the Rome Statute to join the referral, or to submit separate referrals independently.

South Africa remains committed to ending impunity for war crimes, crimes against humanity and genocide, and it is hoped that the situation in Palestine will be prioritised by the ICC in order to deliver justice to the victims of these grave crimes.” —[Republic of South Africa media statement](#)

17 November 2023: “Anderson Cooper’s guest tonight, former Israeli intelligence chief:

“The noncombatant population in the Gaza strip is really a nonexistent term because all of the Gazans voted for Hamas, and as we have seen on 7th of October most of the population in the Gaza strip are Hamas.” —[Joshua P Hill](#)

NOTES: Elections have not been held in Gaza since 2006. About half of Gaza’s current population are children and could not vote in the last election cycle. The people of Palestine have not had a chance to electorally remove Hamas.

QUESTION: Does anyone happen to know the name of this former Israeli intelligence chief?

17 November 2023: “ “And all the wells that his father’s servants dug in the days of Abraham his father were stopped by the Philistines and filled with dust.”

“Vimlaum” appears twice in the Bible, once here and once regarding Philistine virgins - according to Abimelech breaking his oath and filling the wells with dirt, David filled Saul with a hundred Philistine virgins twice as much and gave him two hundred instead of one hundred (Baal Torim): to the king in a hurry, because with a hundred Philistine concubines to take revenge on the king's enemies... And David arose and he and his men went, and there were two hundred Philistine men, and David brought their concubines and A nation for the king.

Since ancient times, we are working to repair the world and they are working to destroy. So 3500 years ago with the Philistines and so with their imagined descendants today even more so. We desire life and they desire terror and death. We fill the land with everything good and they fill it with dirt and ashes.

David added a hundred Philistine foreskins as revenge for plugging the wells with dirt. **Our fighters, who went to war for the house and to take revenge for the terrible massacre carried out by the Nazi terrorists, will cover them in their tunnels with dirt, and will return to peace with the abductees in AZ, only after they have cut off all these damned foreskins.**

“The voice is the voice of Jacob and the hands are the hands of Esau”. Sometimes, so that Jacob’s voice can continue to be heard in churches and seminaries, it is necessary to use Esau’s hand - “by your sword you shall live”. Until our swords are beaten into plowshares and our spears into pruning shears, we need the sharpest swords, the most skilled warriors and the most powerful instruments of destruction in the face of those who seek our harm.

Jacob’s voice will not stop. The strength of our ancestors throughout the chain of generations pulsates among our fearless warriors. In the spirit of the month of Jewish heroism, let’s start walking in the land of our ancestors. Even if it takes some time, with eternity is not afraid of a long way. We will write about the mezuzos and the lintel in the Gaza Strip - a Jewish state for a virtuous people

Shabbat Shalom and Blessed” — [Shlomo Karhi, Communications Minister of Israel](#)

18 November 2023: “And we will tell you what we tell you every day. We are coming. We are coming, We are coming to Gaza. We are coming to Lebanon. We will come to Iran. We will come to everywhere. Can you imagine how many we are going to kill? How many of you we are going to kill? On each of the 1,300 people you killed, kidnapped. You did not see these numbers in all Arab history. I assure you that it will come. In case you are confused I assure you that it will come. Numbers that you did not imagine that it is possible, it is possible to get to them. And we are ready to enter international unity. We are prepared to fight with the United States and the entire world. How long will it take until all of you including all your supporters go up to meet Allah? We will kill, it will be clear. This is the sentiment. So wait in the social media. Do a free Palestine. Do all your crying. We will destroy you. Destroy. Destroy. Share this video with all your friends letting them know what we are doing for you.” —Shai Golden, host on Israeli Channel 14 reported by [The Cradle](#) [video included]

18 November 2023: “#BREAKING| Israel's Haaretz reports that an Israeli official

investigation concluded that an Israeli military helicopter killed Israelis at the Nova rave on 7 October.

#Israel started its offensive on #Gaza, killing over 11,000 Palestinian civilians, nearly half of whom are children, under the pretext of fighting Hamas and claiming that Hamas fighters attacked the festival goers.” —[Quds News Network](#)



18 November 2023: “BREAKING: Brunei, Indonesia and Malaysia call for ‘immediate, durable and sustained humanitarian truce leading to a cessation of hostilities’ ” —[The Spectator Index](#)

18 November 2023: “BREAKING: Al-Jazeera reports that doctors, patients and displaced people at Shifa Hospital have been given an hour to evacuate” —[The Spectator Index](#)

18 November 2023: “BREAKING: Al-Arabiya reports that 450 patients in serious condition remain inside Shifa Hospital” —[The Spectator Index](#)

18 November 2023: “BREAKING: The IDF denies it ordered the evacuation of Shifa Hospital, says it instead accepted a request for evacuation made by the hospital’s director.” —[The Spectator Index](#)

My comment: so, the doctors who refused to leave for the sake of their patients’ safety suddenly begged the IDF to please evacuate them.

18 November 2023: “BREAKING: Reports of growing queues for clean water in Rafah, near the border with Egypt.” —[The Spectator Index](#)

18 November 2023: “BREAKING: Jordan’s foreign minister says, ‘this is not self-defense, this is a blatant aggression and the victims of which are innocent’.”

—[The Spectator Index](#)

18 November 2023: “BREAKING: Palestinian health ministry says over 5,000 children have been killed in Gaza since the start of the war” —[The Spectator Index](#)

18 November 2023: “BREAKING: The IDF says it has now provided ‘fuel, incubators, baby food, medicine, food and water’ to Shia Hospital” —[The Spectator Index](#)

18 November 2023: “BREAKING: Israeli foreign minister says that, after the war, there ‘will be Israeli security control from the Jordan River to the [Mediterranean] sea at all times’ ” —[The Spectator Index](#)

18 November 2023: “BREAKING: Germany’s Chancellor Scholz says ‘we do not want any new settlements in the West Bank, no violence by settlers’ ” —[The Spectator Index](#)

18 November 2023: “BREAKING: Israeli Defence Minister says the IDF has started operating in eastern Gaza City” —[The Spectator Index](#)

18 November 2023: “BREAKING: Saudi Arabia expresses ‘condemnation and denunciation in the strongest terms of the blatant bombing of the UNRWA Al-Fakhoura school in the Gaza Strip, by the Israeli occupation forces.’ ” —[The Spectator Index](#)

18 November 2023: “BREAKING: Israel’s Foreign Minister Eli Cohen says Israel has ‘unprecedented support’ for the war and that there is ‘no diplomatic hourglass’ for its duration.” —[The Spectator Index](#)

18 November 2023: “Today @WHO led a very high risk @UN assessment mission to Al-Shifa hospital in #Gaza.

The team saw a hospital no longer able to function: no water, no food, no electricity, no fuel, medical supplies depleted.

Given this deplorable situation and the condition of many patients, including babies, health workers requested support to evacuate patients who cannot receive lifesaving care there anymore.

We are working with partners to develop an urgent evacuation plan and ask for full facilitation of this plan.

We continue to call for protection of health and of civilians. The current situation is unbearable and unjustifiable.

Ceasefire. NOW.” —[Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization](#)

18 November 2023: “Foreign Minister HH Prince @FaisalbinFarhan announces the start of the work of the ministerial committee in charge of the Arab-Islamic summit concerned with formulating an international action to stop the war on Gaza and the first stop is China.” — [Foreign Ministry Saudi Arabis](#) [includes video]

18 November 2023: “Israel’s right to defend itself from genocidal terror is indisputable. We cannot abandon our obligation to free hostages, secure Israel’s democracy and eradicate Hamas. Conditioning aid to Israel is a gift to Iran and Hamas at the expense of innocent lives.” — [Rep. Debbie Wasserman Schultz](#)

“I dispute that Israel is defending itself and I dispute that Palestinian resistance is genocidal terror. I also dispute that Israel is a democracy. All of this is false, coming from an election rigger.” — [Jason Kishineff](#)

18 November 2023: “This is IMMENSELY significant. And confirms Gaza could well prove to be the US’s Suez crisis moment.

To “formulate an international action to stop the war on Gaza”, Arab-Islamic Foreign Ministers represented by Saudi Arabia say “the first stop will be China”

In other words they now recognize China’s legitimacy as the leading force for peace here. Meaning we effectively aren’t in a US-led world order anymore, in fact they likely now see the US as a disrupter of order...

Let’s see how this pans out. I wrote a couple of weeks back something like this could be happening (see next tweet) and it looks like it’s slowly materializing.” — [Arnaud Bertrand](#)

18 November 2023: “No ceasefire. No compromise. No forgiveness.
#KillThemAll” — [James Wood](#)

18 November 2023: “There will be the first reading of the death penalty law for Palestinian political prisoners, (led by the extremist Ben Gvir) He added, “I expect all members of the Knesset (Israeli parliament) to support this important law”. Now 7,000 [My note: as of the date of this tweet, the number actually had surpassed 10,000] prisoners in Israel” — [VICTORIA](#)

18 November 2023: “Israeli bill advocating death sentence in ‘terror’ cases passes first reading in Knesset” — [VICTORIA](#)

18 November 2023: “No ceasefire. No compromise. No forgiveness.
#KillThemAll” — [James Woods](#)

19 November 2023: “ “Arabs are homophobic & sexist”

Even if that’s true (it isn’t for all Arabs), I would still not support the mass murder of Palestinians.

What’s wrong with you people?!” — [Jory Micah](#)

My comment: Argumentum ad hominem logical fallacy (strawperson argument). The goal is to make a negative claim about someone so as to create hatred and cause

a negative emotional response, in this case generate hatred against Palestinians.

19 November 2023: “Why Israel got the 1400 figure wrong and what it (inadvertantly!) reveals about Oct 7. Read on...

We know that Israeli authorities revised the “1400+ killed” on Oct 7 figure down to 1200. However, insufficient attention has been paid to **the reason given**. How was the figure over by 200?

Lior Haiat, spokesperson for Israel’s Foreign Ministry, said on Nov 10 to the AFP, “It is due to the fact that there were a lot of corpses that were not identified and now we think those belong to terrorists...not Israeli casualties.” ([WHO Chief outlines ‘unimaginable conditions’ in Gaza hospitals to UN Security Council](#))

Mark Regev, Senior Advisor to Israeli PM, added in an interview with Mehdi Hasan on Nov 17 that “there were actually **bodies that were so badly burnt**, we thought they were ours; in the end, apparently, they were Hamas terrorists.” ([YouTube video](#)).

Now, this is interesting! Because so far, it was alleged that all the “burning” was done by Hamas fighters. But unless they were burning themselves, it seems clear the IDF did quite a bit of burning of its own. That is, it used **heavy artillery in civilian areas** to kill the fighters.

This is further proof, if any was needed, that the IDF is responsible for at least some, probably most, of the heavy damage in the kibbutzim, the rave, and other areas, including the killing of Israeli citizens. The question that remains is how many of its own people did the IDF kill?” —[Uthman Badar](#)

19 November 2023: “Israel killed Belal Jadallah, he is the head of Press House in Gaza.” —[Hind Khoudary](#)

19 November 2023: “The Israeli military purposefully targets journalists who expose the full extent of their crimes, aiming to both silence those who speak out for the victims, and instill fear in others. The egregious crimes committed by this army demand that the international community shatter the deafening silence that envelops them.” —[Nabeel Rajab](#)

19 November 2023: “May the streets of Gaza overflow with the blood of these animals.

There is no suffering adequate for these animals. May the streets of Gaza overflow with blood.” —Rep. Randy Fine in deleted tweets



20 November 2024: “Deputy Knesset Speaker Nissim Vaturi doubled down on his call to “burn Gaza” in an interview with 103 FM on Monday.

Vaturi’s Twitter account was blocked after he tweeted on Sunday that Israel had to do “no less than burn Gaza”. In his interview on Monday, he repeated the sentiment, adding that he doesn’t need to be ashamed of it.

“Who’s left in Gaza?” he asked interviewers Yishay Cohen and Ben Caspit. “Are there citizens? There are only tunnels, Hamas, and accursed terrorists who murdered children and are holding children hostage. We have to crush Gaza, Gaza is Hamas.”

Prime Minister Benjamin Netanyahu instructed his government to be sensitive and exhibit caution in their public statements.” —[The Jerusalem Post](#)

21 November 2023: “BREAKING: South Africa’s parliament has voted in favor of a motion to close the Israeli embassy” —[The Spectator Index](#)

21 November 2023: “BREAKING: Scotland’s parliament passes motion calling for an immediate ceasefire” —[The Spectator Index](#)

21 November 2023: “The international community must act more strongly for there to be an immediate cease fire. Nothing can justify Israel’s dehumanizing actions. They can not allege the right to self defense when they are acting in a territory that does not belong to them, a territory that it has occupied through the force of weapons and bombs. Israel’s bombing must cease and the establishment of a free and sovereign Palestinian state must be broguht about.” —Diego Pary, Permanent Representative of Bolivia to the United Nations, video posted by [503i7](#)

22 November 2023: “Ayelet Shaked makes provocative statements on relocating population in Gaza.

Ayelet Shaked, Israel’s former justice minister, has made provocative statements regarding the future of the Gaza Strip, particularly Khan Younis.

She spoke of transforming Khan Younis into a soccer field with ‘the assistance of

God and the IDF'. Shaked said Israel should take 'take advantage of the destruction that we will wreak upon them' in Gaza and pressure countries worldwide into accepting quotas of Gazan refugees, ranging from 20,000 to 50,000 per country. This, she argues, is vital for easing the departure of Gazans, a process she deems complicated until now.

Not the first Israeli politician to have made such comments, Shaked's remarks further implicate the Israeli government and shed light on the ethnic cleansing of the Palestinian people as Israel seeks to resettle what remains of the population in Gaza after the war." —[Middle East Monitor](#)

24 November 2023: "In addition to Norm Finkelstein's very valid observations, here's TWO more reasons that "do you condemn Hamas?" is disingenuous/bad framing.

Hint - BOTH are cases of linguistic over-generalizing:

1) "'Hamas' isn't a single bio-organism. You can't talk of condemning "it" as such. INDIVIDUALS who align to it? Potentially - sure. But to talk of condemning a whole group is yet another case of collective guilt.

2) Moral evaluation applies to SPECIFIC ACTS, not "groups." An individual in a group can and does do multiple things. And if one act by that individual is "condemnable", that doesn't mean other acts by the individual at the same time are. For instance...

People DO have a right to use lethal force for self-defense, including against occupiers.

IF a civilian is harmed, that's a different act which s/b condemned. But recognizing such DOES NOT erase the rightness of the first act.

Demanding a lump "condemnation" obscures that.

A few more points:

1) Israel has mandatory service. A large % is active or retired IDF &/or armed settlers. That makes them combatants. And in the heat of battle, you CANNOT stop & ask people if they're armed (or expect them to tell the truth, either). That's Israel's doing.

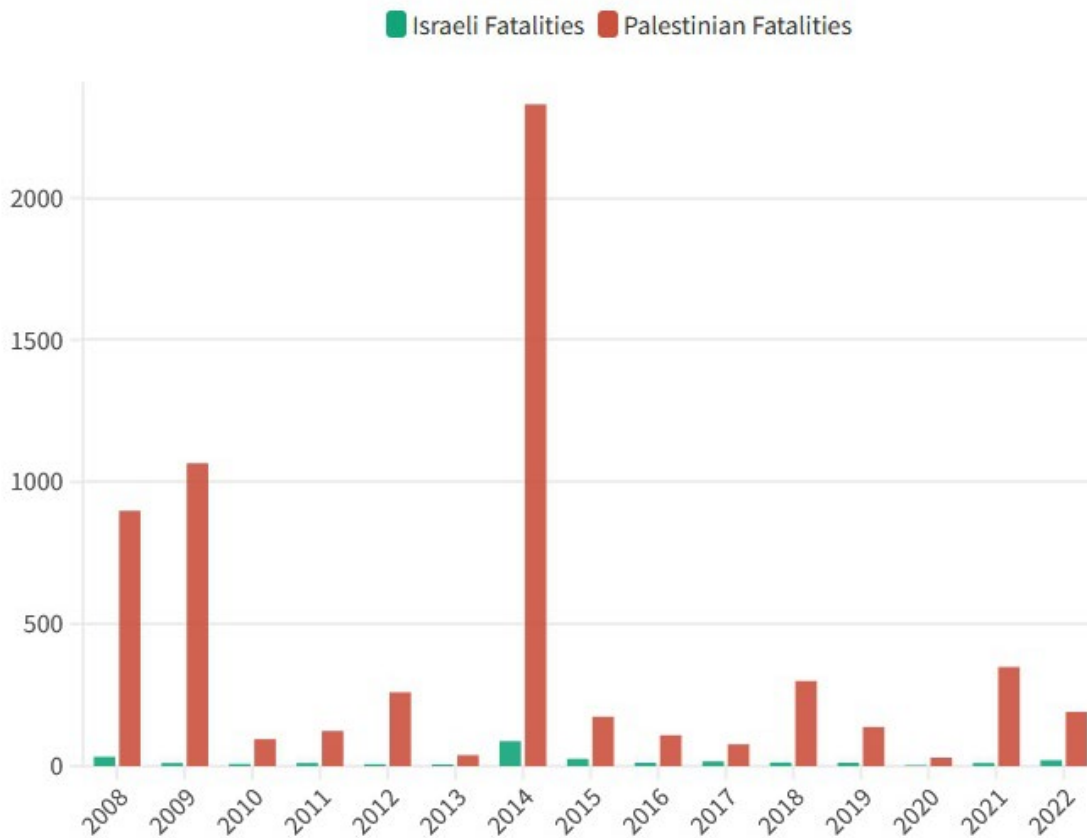
2) And while violence against clear civilians (or war crime atrocities in general) are never excusable ISRAEL still bears the lion's share of the blame/responsibility. It is ISRAELI policies which have fueled any of such suffering, hopelessness & rage. #notinmyname #neveragain" —[gaijingirl](#)

24 November 2023: "A CHALLENGE TO ISRAEL AND ITS SUPPORTERS:

If #Hamas killing hundreds of civilians on 10/7 justifies slaughtering thousands of #Palestinian kids...

Does it follow that Israel killing 6,000+ Palestinians between 2008 and 2022 justifies the Hamas attack?

YES OR NO?" —[Peter Daou](#)



Source: [United Nations Office for the Coordination of Humanitarian Affairs](#)

25 November 2023: “The White House has requested the removal of restrictions on all categories of weapons and ammunition Israel is allowed to access from U.S. weapons stockpiles stored in Israel itself.

The move to lift restrictions was included in the White House’s supplemental budget request, sent to the Senate on October 20. “This request would,” the proposed budget says, “allow for the transfer of all categories of defense articles.”

The request pertains to little-known weapons stockpiles in Israel that the Pentagon established for use in regional conflicts, but which Israel has been permitted to access in limited circumstances — the very limits President Joe Biden is seeking to remove.

“If enacted, the amendments would create a two-step around restrictions on U.S. weapons transfers to Israel,” said John Ramming Chappell, a legal fellow with the Center for Civilians in Conflict.

Created in the 1980s to supply the U.S. in case of a regional war, the War Reserve Stockpile Allies-Israel, or WRSA-I, is the largest node in a network of what are effectively foreign U.S. weapons caches. Highly regulated for security, the stockpiles are governed by a set of strict requirements. Under circumstances laid out in these requirements, Israel has been able to draw on the stockpile, purchasing the weapons at little cost if it uses the effective subsidy of U.S. military aid.

With the WRSA-I, Biden is looking to lift virtually all the meaningful restrictions on the stockpile and the transfer of its arms to Israel, with plans to remove limitations to obsolete or surplus weapons, waive an annual spending cap on replenishing the stockpile, remove weapon-specific restrictions, and curtail congressional oversight. All

of the changes in the Biden budget plan would be permanent, except for lifting the spending cap, which is limited to the 2024 fiscal year.

The changes would come in an arms-trade relationship that is already shrouded in secrecy, as *The Intercept* recently reported. Whereas the administration has provided pages of detailed lists of weapons provided to Ukraine, for instance, its disclosure about arms provided to Israel could fit in a single, short sentence. Last week, Bloomberg obtained a leaked list of weapons provided to Israel, revealing that they include thousands of Hellfire missiles — the same kind being used extensively by Israel in Gaza.

The effect of lifting the restrictions on transfers to Israel — such as eliminating the requirement that the weapons be part of a surplus — could harm U.S. interests by diminishing American preparedness for its own conflicts in the region, said Josh Paul, a former official who served in the State Department's Bureau of Political-Military Affairs.

Paul, who resigned over U.S. arms assistance to Israel, told *The Intercept*, “By dropping the requirement that such articles be declared excess, it would also increase the existing strain on U.S. military readiness in order to provide more arms to Israel.”

The U.S. government is only supposed to spend \$200 million per fiscal year restocking the WRSA-I — about half the total cap for all U.S. stockpiles round the globe. The White House request, however, would waive the limit on U.S. contributions to the stockpile in Israel. That would allow the stockpile to be continuously replenished.

“The President's emergency supplemental funding request,” Paul said, “would essentially create a free-flowing pipeline to provide any defense articles to Israel by the simple act of placing them in the WRSA-I stockpile, or other stockpiles intended for Israel.”

The U.S. currently requires that Israel grant certain concessions in exchange for certain types of arms assistance from the Pentagon, but the White House request would remove this condition as well.

Finally, the White House request would also reduce congressional oversight of U.S. arms transfers by reducing the length of advance notice made to Congress before a weapons transfers. Under current law, there must be 30 days prior notice, but the Biden budget request would allow this to be shortened in “extraordinary” circumstances.

“The Biden administration's supplemental budget request would further undermine oversight and accountability even as U.S. support enables an Israeli campaign that has killed thousands of children,” said Chappell, of Center for Civilians in Conflict.” —[the Intercept](#)

26 November 2023: “Let's fuse this mass anti-war movement in defense of the Palestinian people with the growing movement of the working class.

Mobilize working people in the US, the Middle East, and all over the world to put an end to capitalism!” —Barry Grey, video posted by [World Socialist Web Site](#)

26 November 2023: “Crazy coincidence how every single step of Israel’s military operations against Hamas in Gaza look exactly the same as what you’d expect to see if Israel was trying to permanently drive Palestinians off a large stretch of Palestinian land.” —[Caitlin Johnstone](#)

27 November 2023: “The rebuttal is often made that, well, Israel has killed civilians also in Gaza, but there is an important difference here, which is that Israel tries to avoid killing civilians, doing everything it can to avoid killing civilians, and there’s no sort of joy expressed.” —Elon Musk, reported by [Stew Peters](#) with audio

27 November 2023: “Much attention deservedly given to the Israeli hostages seized on 10/7 by Hamas fighters, but very little attention given over the years for 100s of innocent Palestinians imprisoned by Israel without charges in order to control their extended families in the West Bank and Gaza.

Finally the media will begin to give them some recognition due to the hostage exchange.” —[Ralph Nader](#)

27 November 2023: “Israel and the West will never recover any moral credibility after exposing the true nature of Israeli and U.S. settler-colonialism that has at its core - white supremacy.” —[Ajamu Baraka](#)

27 November 2023: “With an exchange of 50 Hamas-seized hostages for 150 Israeli-seized youngsters and women, held for years without charges, their freedom is starkly different. The Israeli hostages will be sent to functioning hospitals via operating ambulances and helicopters...

Palestinian hostages will not have such amenities. Some 150 hospitals and health facilities destroyed or rendered inoperable by Israeli missiles. After the truce, Palestinian hostages enter a free fire zone where their very existence will face Israeli assault day after day.” —[Ralph Nader](#)

27 November 2023: “JUST IN: Benjamin Netanyahu and Elon Musk Condemn Hamas as a “Death Cult” and “New Nazis”

- Netanyahu labels Hamas as a “death cult,” drawing parallels with the Nazis, asserting they would do more if they had the talent.

- Musk agrees with Netanyahu’s characterization, expressing his concern over protests in favor of Hamas.

- Netanyahu proposes:

“Together with Arab countries, we must demilitarize, deradicalize and rebuild Gaza”

- Musk advocates for Israel to take a post-conflict approach similar to the Allies in Germany and Japan, emphasizing the need to halt Hamas's threats against Israelis.

- @elonmusk also expresses a desire to assist in the rebuilding of Gaza after the war, calling for an end to anti-Israel propaganda, saying:

“The propaganda against Israel must stop... I want to help rebuild Gaza after the

war.”

Source: Israeli Channel 14” — [Mario Nawfal](#) [tweet includes audio]

28 November 2023: “Antisemitism against dying Arabs in Palestine, mostly women and children, is spreading among U.S. companies and corporate law firms. They are throwing away job offers and resumes from young Americans who have spoken out against Israel’s genocidal war crimes and are supporting Palestinians rights to a state of their own. The lasting shame on these corporatists will not be forgotten.”

— [Ralph Nader](#)

29 November 2023: “Sometimes Israel’s crimes are so horrific that at first you don’t even understand what you’re looking at. You just stare at it trying to make sense of what you’re seeing for a bit, like you would if you suddenly saw a space alien or a leprechaun or something.

It happened to me yesterday when I was watching a Sky News report about a teenage boy who was shot by Israeli forces in Jerusalem for celebrating the release of Palestinian prisoners in the hostage negotiations with Hamas. I was watching it thinking to myself, I must be misunderstanding what I’m looking at. I know that Israel does gross things, but surely the story here isn’t that they shot a kid for being happy about something.

Then, as has happened so many times over the last two months, I kept watching and learned that yes, that is indeed what happened. The deputy mayor of Jerusalem Fleur Hassan-Nahoum is seen defending the shooting by saying “part of the deal is that there would be no celebrations for the release of attempted murderers” (this was actually not a part of the deal, it was just a decree issued by Israel’s national security minister) and claiming dishonestly that “we’re talking about the release of attempted murderers” (the vast majority have not been convicted of any crime and have been denied any due process for the accusations against them).

The band Eve6 nicely summed up what it felt like watching the clip of the deputy mayor’s comments, tweeting, “The remarkable thing about this clip is her self assurance. Like she’s supremely confident that ‘we shot the teenager because he was celebrating’ is a thing that people will find reasonable.”

I had the same experience reading about the five premature babies who were left to die after the IDF raided al-Nasr Pediatric Hospital in Gaza earlier this month, their decomposing bodies only discovered when the temporary ceasefire allowed access to the hospital. It’s just too insane to believe — they attacked a pediatric hospital? And then they left the babies there to die? What??

The only reason we’re learning about this now is because the pause in fighting allowed journalists to get cameras into the building and show the dead infants to the world. This calls to mind the Politico report immediately prior to the ceasefire which said that the White House was worried “an unintended consequence of the pause” would be “that it would allow journalists broader access to Gaza and the opportunity to further illuminate the devastation there and turn public opinion on Israel.”

Indeed, since the pause in fighting began the world has been receiving drone

footage from mainstream platforms like Reuters and *The Washington Post* revealing vast expanses of urban terrain completely destroyed by a blanket of Israeli military explosives spanning from city block to city block. Looking at the blatantly indiscriminate devastation that's been caused by Israel's assault on Gaza since October 7 makes it clear that the IDF are not targeting Hamas but Gaza itself.

I've been amazed at how much I've been sleeping since the ceasefire started; that's why I haven't been writing as much. I guess spending weeks staring at unbelievable horrors unfolding on your screen can be pretty hard on your system if you're sensitive to that sort of thing, so my body's been resting up as much as it can while there's an opportunity.

And I'm just here watching this all unfold safely from my home in Melbourne. I cannot imagine what it's like to be living in the midst of this horror for the last two months, trying to figure out the best way to survive while also grieving the family, friends and neighbors you're losing along the way. These people have all been deeply traumatized in ways that will haunt them for the rest of their lives, if they survive the violence, disease and deprivation that's to come.

This thing is so astonishingly ugly, and it could get a whole lot uglier after the ceasefire ends. If there's anything positive to be found in this living nightmare, it's that it's so earth-shakingly ugly that it just might shake the world awake." —[Caitlin Johnstone](#)

30 November 2023: "Israel has one of the most sophisticated militaries in the world. It is capable of neutralizing the threat posed by Hamas, while minimizing harm to innocent men, women and children.

Israel needs a clear plan that puts a premium on protecting civilians.

Hamas cannot remain responsible for governance in Gaza and it cannot retain the capacity to repeat those attacks. How Israel does it. Those are decisions for Israel to make.

Ultimately, that's not just the right thing to do. It's also in Israel's security interest." —US Secretary of State Antony Blinken, reported by [Elizabeth Hagedorn](#)

30 November 2023: "Israel Air Force bombed Gaza killing 16,000 Palestinians, 6,150 children and 4,000 women, leaving 7,000 under rubble, 4,700 children and women, 35,000 injured, many with amputations. IAF killed 207 medical doctors, 26 civil defense rescue workers, 70 journalists.

Israel Air Force destroyed 50,000 housing units in Gaza, 88 mosques, 103 government offices and damaged 240,000 housing units, 266 schools, 174 mosques and 3 churches. 3 hospitals and 55 health centers are no longer operating." —[Laurence Boorstein](#)

1 December 2023: "If Israel's military is as sophisticated as Anthony Blinken says it is then they killed 9,000 children on purpose over the last 6 weeks." —[Chuck](#)

1 December 2023: "The ICC convicted Slobodan Milosevic of genocide based on

the ... murder of 8,000 people.

Netanyahu has slaughtered more than 8,000 CHILDREN alone in the last 7 weeks.

The ICC will never prosecute Netanyahu because Israel is a rich country who is in the good graces of NATO.” —[503i7](#)

2 December 2023: “The majority of people slaughtered by Israel in Gaza with our bombs are women and children. [“United Nations report says 70% of deaths in Gaza are women and children” —Ukrainska Pravda, 31 Oct 2023] You cannot be a feminist and not demand a permanent ceasefire and an end to the occupation. War is a women’s issue.” —[Professor Anthony Zenkus](#)

2 December 2023: “Here’s a good way to understand this.

If YOU DO NOT HATE YOURSELF, you are NOT a SELF HATING JEW.

Do not let Zionists use the SAME LANGUAGE that the German National Jews used to try and hurt you or shake your faith.

I say this because Zionist Nazis are labeling Jews all kinds of horrible things for wanting an end to the deaths of children.” —[Squid Diddly](#)

2 December 2023: “Acclaimed Canadian pop artist Abel “The Weeknd” Tesfaye is providing 4 million meals to the United Nations World Food Programme (WFP) to help people in Gaza, the UN body said.

Tesfaye, who is a UN Goodwill Ambassador, has directed \$2.5 million from his XO Humanitarian Fund towards WFP humanitarian efforts in Gaza, according to WFP’s statement Friday.

The donation equates to 4 million emergency meals, which will fund 820 metric tons of food parcels that can feed more than 173,000 Palestinians for two weeks, it said.” —[CNN](#)

2 December 2023: “Murder = the unlawful premeditated killing of one human being by another.

Israel has not murdered a single child in Gaza.

Dispute that.” —[Dovid Efune](#), publisher *New York Sun*

2 December 2023: “ “They’re lawfully killing children” isn’t the win you think it is here” —[omar](#)

3 December 2023: “Jewish people have the right to live in safety and security.

Jewish people have the right to be outraged about antisemitism.

Jewish people have the right to fight back against hate.” —[Hen Mazzig](#)

My comments: I agree with everyone of those rights (assuming “fight back against hate” is a metaphor and not an actual call to murder anyone you accuse of hate)

1) None of those rights justify genocide.

2) Are there any conditions under which you’d grant a much lesser version of any of those rights to ONE Palestinian baby?

3 December 2023: “The vice president is now saying too many innocent lives have been lost in Gaza.

Ya think?

15,000 murdered civilians, including nearly 7000 murdered children and babies later...

I guess, election polling numbers have them changing their stance on the unequivocal defense of genocide.” —[Bishop Talbert Swan](#)

3 December 2023: “The IDF has entered the south of Gaza with the full force of its ground forces - armor and infantry (including my son and son-in-law) — together with the Israeli air force and navy. IDF has hit 600 military targets and 10,000 air strikes, all the while taking care to avoid injuring innocent civilians. Several Hamas military leaders have been taken out. A deck of cards with the pictures of the most wanted terrorists is being distributed to our soldiers.

It’s great to see the IDF back in action after 10 days of Hamas trickery in the context of the hostage negotiations. 137 living and dead hostages remain in the hands of the Palestinian terrorists. We want to bring them home while we pound the enemy.” —[Marc Zell](#)

My note: It makes me sad to realize how many people cheer for war

3 December 2023: “The key word here is “stories.” To date, there is no physical evidence of rape by Hamas militants, nor any purported rape victims offering direct testimony.

There are only outlandish “stories” like this from a purported male witness, who uses odd language to describe “a beautiful woman with the face of an angel” being raped by “8 to 10” Hamas militants.

This same “witness” also claims that he then saw another Hamas militant who “took a shovel and beheaded” another woman, whose “head rolled along the ground.” Again, where is the evidence to back this up?

Israel has been caught lying multiple times about atrocities (and Hamas’ hospital HQ) to justify its mass murder campaign in Gaza. And “stories” like this are only starting to “surface” now. It seems clear that this is yet another fabrication in the service of genocide.” —[Aaron Maté](#)

3 December 2023: “Israel intensifies its ground offensive in southern Gaza, leading to a surge in the number of Palestinians killed as the conflict persists.” —[Al Jazeera English](#)

ISRAEL OFFENSIVE IN GAZA**WHAT WE KNOW**

- Multiple deaths reported in southern Gaza after Israeli strikes hit two homes in Rafah overnight
- Residential buildings belonging to al-Hams family and al-Bawab family targeted
- Dozens injured in strikes on Yabna refugee camp and al-Jeneina neighborhood in Rafah
- IDF announces expansion of ground forces operation in Gaza, with a heightened focus in the south



3 December 2023: “At least four killed and nine wounded in an Israeli strike on the northern gate of Kamal Adwan Hospital in Jabalia.” — [Al Jazeera English](#)

3 December 2023: “Israeli forces say they killed Hamas commander Haitham Khuwajari, involved in the October 7 attacks, in an airstrike near the Al-Shati refugee camp outside of Gaza City.” — [Al Jazeera English](#)



3 December 2023: “At least 30 armoured vehicles have been deployed in Jenin, occupied West Bank, as Israeli forces conduct dawn raids in the city and its refugee camps, reports the Palestinian news agency Wafa.” — [Al Jazeera English](#)

3 December 2023: “UN shelters in southern Gaza have seen significant increase in communicable diseases such as diarrhoea, acute respiratory infections, skin infections and lice due to overcrowding.” —[Al Jazeera English](#)



3 December 2023: “Two Palestinians killed by Israeli forces in the occupied West Bank this morning, Palestinian officials tell Al Jazeera.” —[Al Jazeera English](#)

3 December 2023: “Amid Eyal Karim’s appointment as Israeli military chief rabbi, scandal erupted over his writings permitting soldiers to rape women during wartime.

150 Zionist rabbis wrote in support of him, stating that “the attempt to disqualify the rabbi’s appointment due to his legitimate Torah positions is an attempt that will severely harm the entire Torah world in the State of Israel and the Israel Defense Forces”

Karim is now a brigadier general, giving spiritual guidance to Israeli soldiers terrorizing Gaza.” —[Dan Cohen](#)

See: Rabbi Karim

4 December 2023: “Report: A senior Hamas official was killed in Khan Yunis According to the reports, senior Hamas official Nizar Awadallah was liquidated.” —[Shiri Sabra](#)

My note: I understand (but oppose) the killing that happens in a war, but I just can’t imagine what makes someone so soulless and bloodthirsty that they talk about “liquidating” other human beings out of sheer racial bigotry against dark colored skin.

4 December 2023: “It’s been a very deadly and bloody night for the Palestinians not just in the south but also in the central and northern parts of the besieged Gaza

Strip, reports Al Jazeera's Hani Mahmoud.” — [Al Jazeera English](#)

4 December 2023: “As Israel’s war on Gaza and the raids in the occupied West Bank continue, the corruption trial of PM Netanyahu resumes today, reports Israeli media.” — [Al Jazeera English](#)

4 December 2023: “At least 15,523 Palestinians have been killed, including 6,600 children, as Israel continues its bombardment of the besieged Gaza Strip.” — [Al Jazeera English](#)



4 December 2023: “A new House resolution, which may be voted on as early as tonight, “clearly and firmly states that anti-Zionism is antisemitism.” This comes after a previous resolution hinted at that claim, but did not fully state it. So now Congress wants to leave no question.

But there’s an additional trap: Anybody who votes against this resolution will be said to have voted against condemning antisemitism.” — [Ryan Grim](#)

118TH CONGRESS
1ST SESSION

H. RES. 894

Strongly condemning and denouncing the drastic rise of antisemitism in the United States and around the world.

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 28, 2023

Mr. KUSTOFF (for himself and Mr. MILLER of Ohio) submitted the following resolution; which was referred to the Committee on the Judiciary, and in addition to the Committee on Foreign Affairs, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

RESOLUTION

Strongly condemning and denouncing the drastic rise of antisemitism in the United States and around the world.

Whereas acts of hate, intimidation, discrimination, and violence based on ethnicity or religion have no place in our country nor in the global community;

- 1 *Resolved*, That the House of Representatives—
- 2 (1) strongly condemns and denounces all in-
- 3 stances of antisemitism occurring in the United
- 4 States and globally;
- 5 (2) reaffirms and reiterates its strong support
- 6 for the Jewish community at home and abroad;
- 7 (3) calls on elected officials and world leaders
- 8 to condemn and fight all forms of domestic and
- 9 global antisemitism;
- 10 (4) clearly and firmly states that anti-Zionism
- 11 is antisemitism; and
- 12 (5) rejects all forms of terror, hate, discrimina-
- 13 tion, and harassment of members of the Jewish com-
- 14 munity.



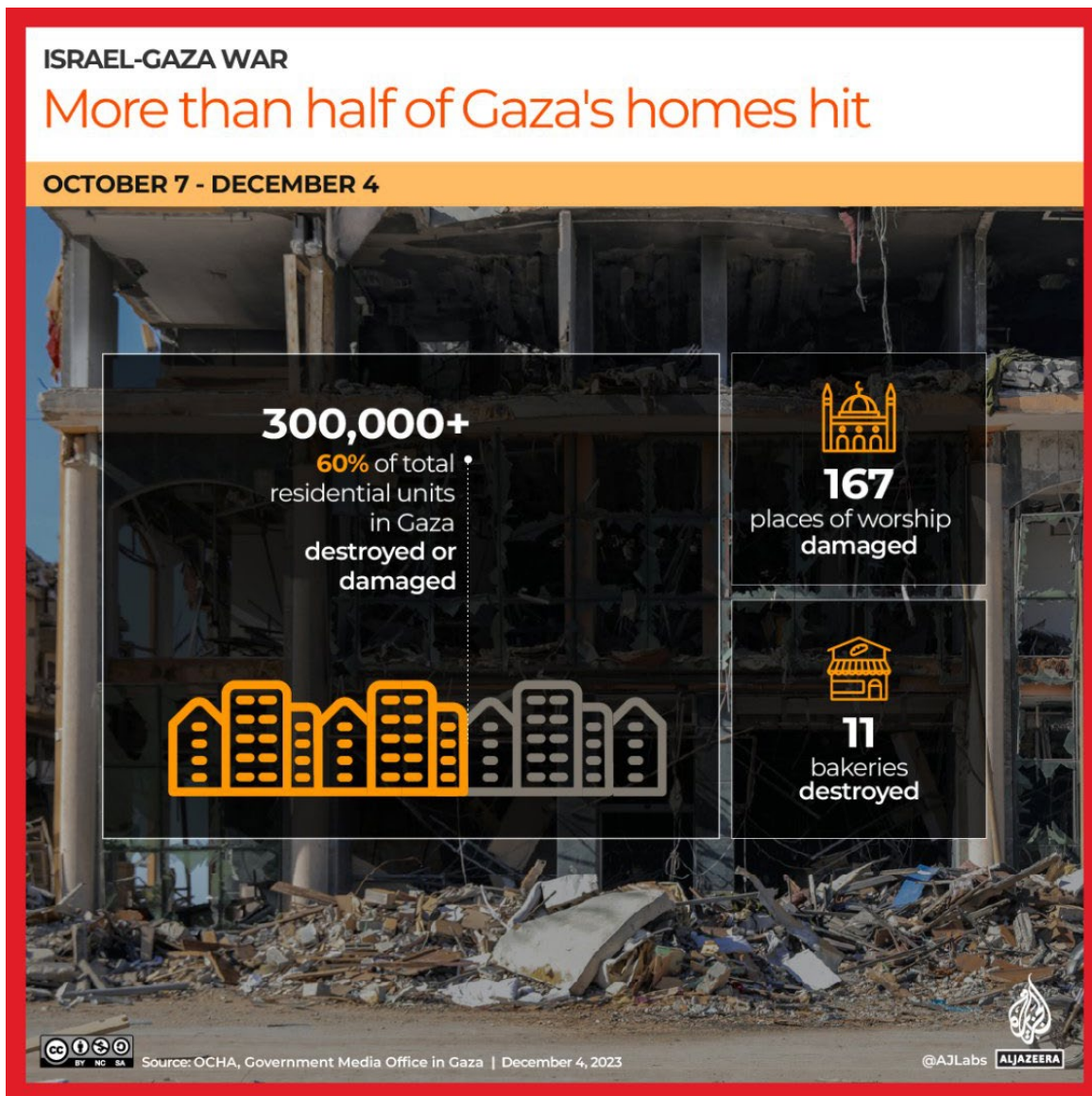
4 December 2023: “This has nothing to do with Israel and Palestine. This has everything to do with criminalizing speech. Anti Zionism is the excuse, this will continue to expand to any/all dissent against the government will be criminal.”

—[JMooreBoston](#)

4 December 2023: “Let me be clear. The proposed HR 894 is an assault on Freedom of Speech and Expression and a volume of lies. Equating peaceful protestors with “rioters” is the same tactic utilized by white supremacists to beguile the public against the 1960s Civil Rights effort. It didn’t work then and it won’t work now! #Ceasefire #FreePalestine” —[Cornel West](#)

4 December 2023: “Israeli attacks on the Shujaiya neighbourhood, east of Gaza City, have destroyed more than 50 homes, says the Palestinian Foreign Ministry. ”

—[Al Jazeera English](#)



4 December 2023: “Sending Palestinians into the South, telling them it is a safe zone, then bombing it is a war crime that the generals and Netanyahu must answer for. I denounce the IDF for that action.” — [Wildcat Molotov Bluecheck](#)

4 December 2023: “I promise there is nothing you can say to me that will cause me to cease opposing the murder of thousands of children. There is no name you can call me, no accusation you can scream at me, no talking point you can regurgitate at me that will ever make me shut up and accept this.” — [Caitlin Johnstone](#)

4 December 2023: “The Horrors In Gaza Are Happening Because The US Empire Wants Them To Happen

I came across an interesting quote made last month by a retired Israeli major general named Yitzhak Brick about the ongoing IDF assault on Gaza.

“All of our missiles, the ammunition, the precision-guided bombs, all the airplanes and bombs, it’s all from the U.S.,” Brick said. “The minute they turn off the tap, you can’t keep fighting. You have no capability. ... Everyone understands that we can’t fight this war without the United States. Period.”

Brick made these observations not as an anti-imperialist critique of the US war machine, but as part of a diatribe about how ridiculous it is for Israel to be asked by Washington to allow humanitarian aid into Gaza and to try to avoid civilian casualties. He apparently believes Israel should be killing far more Palestinians in Gaza, not fewer.

Brick — whose warnings of an impending Hamas attack were dismissed and ignored by Israeli government and military officials in the lead-up to the events of October 7 — makes an important point nonetheless. The support of the US war machine is absolutely 100 percent essential for Israel's continued murderous onslaught in Gaza, which just killed some 700 people in a single 24-hour period. This necessarily means that these ongoing acts of human butchery are occurring because the US permits them to.

Brick's comments fly in the face of narratives fed to the press by the Biden administration saying that the White House is frustrated by Israel's complete disregard for human life in Gaza but finds itself powerless to influence its ally's actions in a more humanitarian direction.

In an article published last month titled "White House frustrated by Israel's onslaught but sees few options," *The Washington Post* reports that according to unnamed US officials the Biden administration believes that "Israel's counterattack against Hamas has been too severe, too costly in civilian casualties, and lacking a coherent endgame, but they are unable to exert significant influence on America's closest ally in the Middle East to change its course."

This is of course a load of bullshit. The Biden administration could end all this with one phone call, in the same way it commanded Israel to restore Gaza's communications in October after the IDF cut the enclave off from the world, and in the same way Israel's 1982 assault on Lebanon was halted with a phone call from President Reagan.

The ongoing massacre in Gaza is happening because the US empire wants it to happen. They could stop the bloodshed at any time, but they don't, because they do not want to. This is because the US empire is run by sociopaths who only care about global domination, and nonstop violence from Israel is a key component in the domination of a crucial geostrategic region on this planet.

Don't let the monsters in Washington DC and Virginia wash their hands of this horrific atrocity. They know exactly what they're doing. They're every bit as responsible for Israel's crimes against humanity as Israel itself. They posture and pay lip service to the protection of civilian lives, but they do so exclusively for their own PR interests. These freaks would happily send every Palestinian alive to the gas chambers if they thought it would advance their strategic interests one iota." — [Caitlin Johnstone](#)

4 December 2023: "I'm going to say this once regarding the rape allegations against Hamas. I'm not here to defend them. They are defending themselves, and have denied all the allegations including the beheading babies, the HQ command center beneath the Al Shifa Hospital stories etc. that were all proven to be hoaxes.

My point is this, Israel lies ALL THE TIME and have been called out in real-time over the past 50+ days. Israel does not get to make accusations to further paint all Palestinians as savages and barbarians in an attempt to whip the the public into a frenzy with the aim of garnering support for their genocidal agenda.

No, I will not believe a word you say until and unless you provide **empirical evidence** for every claim. You do not get the luxury of just claiming shit and expect people to believe you. Your reputation is atrocious.

I'm not even saying it didn't happen. My personal opinions don't matter. I'm simply saying PROVE IT or STFU. I'm tired of all the attempts to shame people into believing your stories. I'm tired of you calling people antisemitic for asking for proof. I'm tired of the gaslighting.

You don't get the benefit of the doubt after what you've done to the Palestinians. This isn't just about this specific allegation, it goes for any and every accusation Israel makes. In my book, its 100% bullshit propaganda until proven true, with Israel."

—[Nader](#)

4 December 2023: "Israel and The US hated seeing how everybody reacted to the hostages being so nice to Hamas and thanking them, they had to cook up something to make them look bad.. Now all of a sudden everyone got raped by Hamas, it's hilarious!" —[Rome Bethea](#)

4 December 2023: "Nothing justifies killing over 12,000 children. Nothing. Not self defense. Not human shields. Not a damn thing." —[Mohamad Safa](#)

4 December 2023: "The death rate in Gaza is at a historic high, with thousands of children killed in just a few weeks.

Demanding an end to this inexcusable violence is a question of basic humanity. Silence is complicity. You cannot be silent in an unfolding genocide." —[Greta Thunberg](#)

4 December 2023: " "Believe all women" was always an absurd overreach: woman should be heard, claims should be investigated, but evidence is required. The same is true of the allegations out of Israel.

But also, this isn't a "believe women" scenario bc no female victims have offered testimony.

Zionists are asking that we believe the uncorroborated eyewitness account of *men* who describe alleged rape victims in odd, fetishistic terms.

Shame on Israel for not seriously investigating claims of rape and collecting rape kits." —[Brihna Joy Gray](#)

4 December 2023: "14 kids under 10, 25 people over 80: Up-to-date breakdown of Oct 7 victims we know about

Age, gender data for most civilian victims of Hamas onslaught, based on media tally, provides a picture authorities aim to complete as they continue efforts to identify bodies

Partial data by Hebrew media [Walla news site] covering the civilians — killed by thousands of invading terrorists and by some of the thousands of rockets fired that day at Israeli cities — reveals that they include two infants, 12 other children under the age of 10, 36 civilians aged 10-19, [100 civilians aged 65-80,] and 25 elderly people over the age of 80, accounting for 75 of the 764 civilians.” — [The Times of Israel](#)

5 December 2023: “Oct 7 was a successful military operation by Hamas that required speed and precision

According to Jericho Wall, the document that laid out their plan, everything was timed. Speed was essential in carrying out their operation, especially if you are taking hostages like they planned

So despite time being of the essence, Zionists would have you believe that these Hamas fighters stopped what they were doing, in droves, to rape women and men that would have taken gods know how long

Israelis and Zionists lie about fucking everything. They claimed Hamas was operating a fucking hospital. I unapologetically believe NOTHING they say” — [Revolutionary Blackout Network](#)

5 December 2023: “In one of the testimonies the witness only survived because he covered himself in dead bodies and smeared their blood over themselves to trick Hamas into thinking they were dead

Despite this, and going through insane amounts of trauma, this person was able to specifically identify one of the girls as having a “face of an angel”

He was also able to accurately quote her and then count how many solders there were

Remember, this is while he was covered in dead bodies and blood

Who believes this shit?” — [Revolutionary Blackout Network](#)

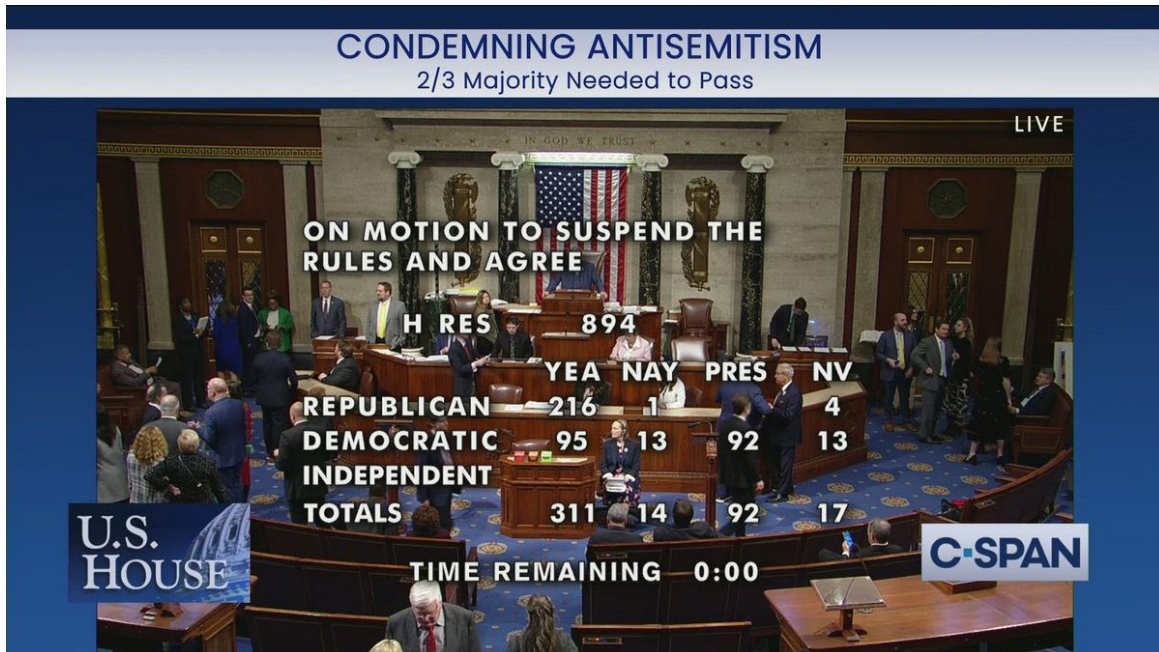
5 December 2023: “This asinine talking point is convincing no one. Coroners routinely look for evidence of sexual assault in murder cases. Failing to look for sexual assault related trauma or collect dna evidence while simultaneously alleging “mass rape” would be negligence of the highest order. Alternatively, there may have been no evidence.” — [Briahna Joy Gray](#)

reference article in her tweet: [Sexual Assault: Forensic Examination in the Living and Deceased](#)

5 December 2023: “I personally do not believe it’s anti-semitic to criticize Israel’s murderous actions in Gaza. See I have this wild idea that murdering children is *not* an aspect of the Jewish faith, and that saying otherwise actually has a very ugly history in our society.” — [Caitlin Johnstone](#)

5 December 2023: “Legislators in the world’s most powerful government just passed a resolution saying that Judaism is synonymous with a colonialist ideology which routinely murders children.” — [Caitlin Johnstone](#)

5 December 2023: House voted 311-14 to “strongly condemn and denounce the drastic rise of antisemitism in the United States and around the world.” and “clearly and firmly states that anti-Zionism is antisemitism.” Needed two-thirds vote. 92 Democrats voted Present.



5 December 2023: “Israel has killed 271 civilians and about 130 children every single day for two months.” —[503i7](#)



5 December 2023: “The NFL is allowing players to take a knee for Israel? I have questionsÉÉ.” —[Kenny Akers](#)



6 December 2023: “Statement from President Gay: There are some who have confused a right to free expression with the idea that Harvard will condone calls for violence against Jewish students. Let me be clear: Calls for violence or genocide against the Jewish community, or any religious or ethnic group are vile, they have no place at Harvard, and those who threaten our Jewish students will be held to account.”
—[Harvard University](#)

[6 December 2023: “Israel’s new settlement plan is to “flood Jerusalem with settlements and settlers” said the Palestinian FM.](#)

[Silwan forced expulsion](#)

[More than 100 buildings housing about 1,500 people in the al-Bustan area of Silwan in occupied East Jerusalem face demolition to make way for an Israeli religious theme park.” —Al Jazeera English](#)



6 December 2023: “Israeli forces are flooding Gaza with seawater, under the pretext of destroying the tunnels. This will result in the long-term destruction of groundwater & aquifers, rendering agriculture & drinking water impossible, eliminating life for decades. This is a crime against humanity” —[Hanine Hassan](#)

6 December 2023: “The UN Secretary General has invoked Article 99 and is calling for a full ceasefire in Gaza to prevent a “humanitarian catastrophe”. The only thing standing in the way of this resolution passing is Joe Biden, who has the power to order the US ambassador to veto it.” —[Professor Anthony Zenkus](#)

7 December 2023: “US Secretary of State Antony Blinken told officials in Israel’s war cabinet last week that the US believed the war should end in weeks, not months, reports *The Wall Street Journal*.” —[Al Jazeera English](#)

7 December 2023: “LIVE DAY 62 #Israel #Palestine
- UN chief warns Israel-Palestine war threatens global peace
- Israel boasts ‘200th cargo plane’ of weapons delivered by US

- New wave of displacement underway” —[Sparkle](#)

7 December 2023: “I keep hearing this. Which college students in the US have been going around chanting “Gas the Jews” or “Murder all Jews”?”

If this is the epidemic that today’s campus censorship advocates claim it is, it should be easy to provide multiple examples. Where are those?

The goal is to ban Israel criticism for Americans. So the claim is: they implicitly mean “kill all Jews,” and thus must be censored.

Just like liberals say: what conservatives really mean is “kill all Black and trans people.”

Should it be permissible to say on American college campuses what Netanyahu’s chosen former leader of the Mossad said about Israel in September?

[Greenwald then links to a Guardian article headlined Israel imposing apartheid on Palestinians, says former Mossad chief]” —[Glenn Greenwald](#)

7 December 2023: “But anti-Zionists don’t know what genocide means...” —[Dark Warlord](#)



DEFENDDEMOCRACY.PRESS

Leave no one alive’: Senior rabbi calls for execution of all Palestinians



Israeli Prime Minister Benjamin Netanyahu holds a map of "The New Middle East" without Palestine during his September 22, 2023 address to the United Nations General Assembly in New York. (Photo: Spencer Platt/Getty Images)

Netanyahu Shows Map of 'New Middle East'—Without Palestine—to UN General Assembly

// Anyone waving a Palestinian flag
shouldn't continue living on the
face of the earth. **//**

Amichai Eliyahu
Israeli Heritage Minister





7 December 2023: “If Israel is allowed to continue these daily massacres until the reported Israeli proposed cutoff date in early January, most Palestinians in the Gaza Strip and West Bank will be dead from famine, disease, torture, execution by IDF soldiers, winter cold, or bombs while they sleep

And @POTUS seems dedicated to buying Israel as much killing time as possible while supplying the bunker buster bombs they have used to murder almost 10,000 children. At least. Holy fucking shit what will it take for Biden to demand a permanent ceasefire? This is horrific.” —[noooooope](#)

7 December 2023: “It is not the Israeli Defense Force’s strategy to kill innocent people. It’s happening. I admit that. Each one’s a tragedy, but it’s not like the Israelis are sitting around every morning and saying. “Hey, how many more civilians can we kill today? Let’s go bomb a school or a hospital or a residential building and cause civilian casualties.’ They’re not doing that. They’re trying to go after Hamas. And it’s a very difficult task. When Hamas oh by the way, in addition to deliberately slaughtering people, is deliberately hiding themselves in residential buildings, in hospitals, in tunnels, putting the innocent people of Gaza directly in the crossfire.

Now, you tell me, is that right?" —White House NSC Coordinator John Kirby in video shown by [Jacob N. Kornbluh](#)

7 December 2023: "Today I spoke with Prime Minister Netanyahu to express my concern for the remaining hostages — and to note that it was Hamas's refusal to release women civilian hostages that broke down the humanitarian pause.

We will continue to pursue every opportunity to free them." —[President Genocide Joe Biden](#)

7 December 2023: "It was Netanyahu's refusal to receive the bodies of a young mother and her two infants, killed by Israeli airstrikes that made Netanyahu pull the plug.

It was the last offer Hamas made. 10 or 12 hostages, inc 3 bodies. Netanyahu rejected it. He wanted IDF females next. Hamas said IDF militants M/F require new negotiations & different formula for hostage/prisoner exchange. Netanyahu rejected that then resumed bombing." —[Dr Nazren Kadir](#)

7 December 2023: "Abou the humanitarian situation in Gaza.

Tell me one more nation, any other nation that's doing as much as the United States to alliviate the pain and suffering of the people of Gaza.

You can't. You just cant'.

The United States through President Biden is leading the effort to get truck, food, water, medicine, and fuel in to the people of Gaza.

Wait, wait! Name another nation that is doing more than the United States to get hostages out or to get people foreign nationals out of Gaza. You can't do it.

And name another nation that is doing more to urge the Israeli counterparts our Israeli counterparts to be as cautious and deliberate as they can be in the prosecution of their military operations. You can't.

The United States is at the forefront of this." —John Kirby in video uploaded by [Trita Parsi](#)

On Wednesday, 6 December, the Russian Emergency Situations Ministry sent a plane to Egypt wiht 27.5 tons of humanitarian aid destined for the population of the Gaza Strip. The cargo included mattresses, blankets, personal care products, and food. That is addition to the 25 tons 11 October and 60 tons the week before.

Rwanda sent 16 tons.

Turkey, the United Arab Emirates, Qatar, Jordan, Tunisia, India, and the European Union each sent planeloads of aid.

Egypt has sent more than 5,900 tons of humanitarian aid to Gaza.

In two months, the US airlifted 24.5 metric tons of UN humanitarian supplies.

8 December 2023: "BREAKING NEWS: The US Government have vetoed a UN Security Council resolution calling for an immediate ceasefire in #Gaza as the UK abstains.

Final vote

In Favour: 13 (including France, Russia, China, UAE, Albania, Brazil, Ecuador, Gabon, Ghana, Japan, Malta, Mozambique, Switzerland)

Against: 1 (US)

Abstain: 1 (UK)" — [Mohammed Shafiq](#)

8 December 2023: "BREAKING: After the UN Secretary General invoked the rarely used Article 99 to trigger a vote for a ceasefire in Gaza, the US was the ONLY country to vote against it. The US insists on supporting Israel's massacre in Gaza, despite world opinion AND the will of the majority of Americans. And we call ourselves a democracy?" — [Medea Benjamin](#)



8 December 2023: "A humanitarian nightmare is engulfing the people of Gaza.

I invoked Article 99 of the @UN charter, because we are at a breaking point, with a high risk of the total collapse of the humanitarian support system in Gaza, with devastating consequences." — [António Guterres, Secretary-General of the UN](#)

8 December 2023: "One of the Palestinian detainees who were released this morning after their arrest yesterday by the ISRAELI army in Beit Lahiya tells QNN:

The occupation soldiers stripped us naked when they arrested us in the northern Gaza Strip, put us in trucks and took us to the seashore after blindfolding our eyes.

They put us in the cold, without clothes, and we stayed until 12 a.m. tied up without moving. Then they ordered some of us to return home and kept others in detention.

We returned on foot, naked, and were surprised to find that most of the homes we left from had been burned and stolen." — [Jackson Hinkle](#)



9 December 2023: “The Israeli Government does NOT represent the Jewish people.
Critical points to remember!

Israel is NOT our political nationstate

Jews are a religion belonging to many nationalities

Zionism is the diametric opposite of Judaism

Israel is not a Jewish state

Judaism is not a nationalist movement.

Judaism is an ancient religious collective.

Zionism is a nationalist movement created in 1896 by ppl who were pronounced
atheists

They wanted to be called Jewish but without actually believing in Judaism

Zionism is NOT Judaism!

Zionists want to destroy the Jewish religion. They invented an ideology called
Zionism. Zionism became the religion of the Zionists.

They want to destroy Judaism and replace it with the religion they made up,
Zionism.

That’s Zionism” — [Torah Judaism](#); includes video

9 December 2023: “Israeli newspaper finds that 61% of the people in Gaza killed
by Israeli airstrikes are civilians.

“The ratio is significantly higher than the average civilian toll in all the conflicts

around the world during the 20th century.” ” —[Glenn Greenwald](#)

11 December 2023: “Israel has now admitted that up to 90% of the Palestinians seen in recent pictures being stripped and paraded in Gaza were civilians.” —[Mint Press News](#)

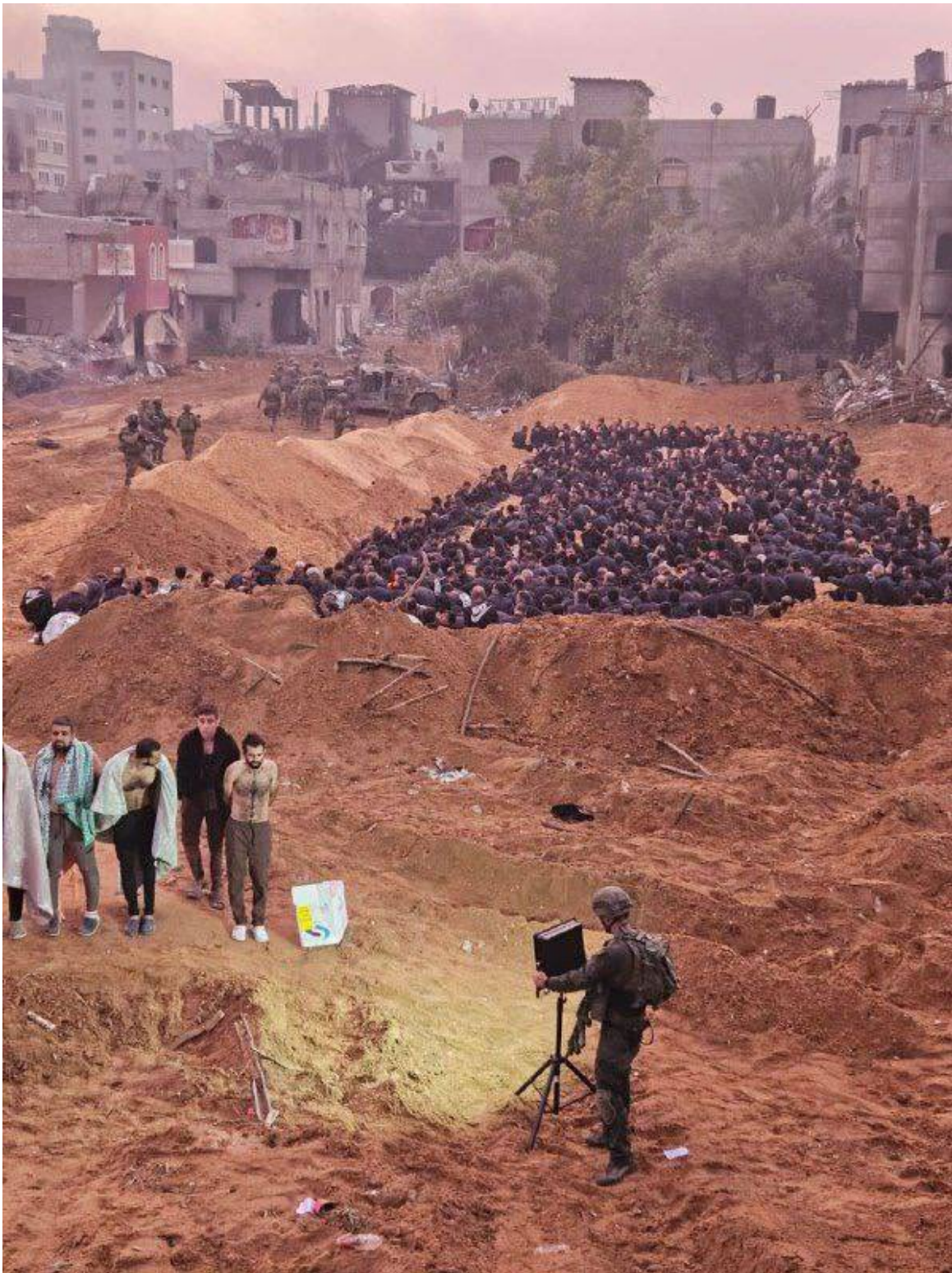
My note: At the time of this writing, Israel has not releasedd any documentaiton to support the claim that any of those detained and stripped were affiliated with Hamas.

It is an international war crime to strip search any prisoner (civilian or POW) without using privacy.

It is an international war crime to use use the photographs of war prisoners (combatants or civilians) for publicity purposes. The international law even specifically prohibits the use of those pictures on social media.

11 December 2023: “Were there no Israel, there would not be a Jew in the world who is safe.” —President Joe Biden as quoted by Will Wessert of [AP News](#)

12 December 2023: “Large group of Palestinian men detained by IDF in Gaza.” —[Clash Report](#)



13 December 2023: “Hitler didn’t want to exterminate the Jews at the time, he wanted to expel the Jews, and Haj Amin al-Husseini went to Hitler and said, ‘If you expel them, they will all come here’

‘So what should I do with them,’ he asked.

He said, ‘Burn them.’

Netanyahu: Adolf Hitler didn’t want to kill the Jews, but a Muslim convinced him to do it.” —video of Israeli Prime Minister Benjamin Netanyahu in a tweet by [503i7](#)

13 December 2023: “The average rate of children killed in modern war is 6 to 8% of the casualties. In Gaza, it’s 42%.” —[Lee Camp \[Redacted\]](#)

13 December 2023: “A Warner Robins, Georgia, teacher is accused of threatening to behead a student after she made a comment about his Israeli flag, according to the Houston County Sheriff's Office.

Benjamin Reese is a 7th-grade social studies teacher at Warner Robins Middle School. He was arrested on Dec. 8.

Several witnesses said they overheard Reese shouting “You motherf*****g piece of s**t! I’ll kick your a**. I should cut your motherf*****g head off,” around students on Friday.

According to the incident report, at around 3:30 p.m. on Dec. 7, a deputy was on duty when he was informed Reese threatened a child’s life. It happened in the 7th-grade technical hallway when students were on their way back to the 8th-grade hallway.

The report says a student wanted to talk to Reese about the Israeli flag in his classroom and told him she found it offensive.

Reese asked her if it had anything to do with Judaism. She wanted to know why it was hanging there, and Reese told the student he was Jewish and had family members who still lived in Israel.

The student says she found the flag offensive “due to Israelis killing Palestinians.”

Reese then told the student she was being antisemitic.

After that, several different witnesses independently said they heard Reese say, “he would kick her f*****g a**, slit her god***n throat and drag her a** outside and cut her head off.”

A faculty member says she heard Reese say, “You don’t make an antisemitic comment like that to a Jew.” The witness says the student responded negatively to Reese but was not yelling.

The witness says the students left the classroom, but Reese followed them down the hallway.

The same witness says Reese was later seen returning to his classroom, cursing extremely loudly. The witness says he was yelling that he “should not be spoken to like that because he is a Jew.”

He went on saying, “I will drag her a** into the parking lot, slit her f*****g throat and kill her.”

A deputy at the school interviewed several witnesses and they said they heard Reese make similar statements. They included other teachers, staff members and students who were in class for tutoring or after-school detention.

A judge set Reese’s bond at \$2,500 for the terroristic threat charge and \$5,000 for the charge of cruelty to children. Reese bonded out.” —[13 WMAZ](#)

13 December 2023: “I tell you, in Gaza, without exception, they are all terrorists, sons of dogs. They must be exterminated, all of them killed. We will flatten Gaza, turn them to dust, and the army will cleanse the area. Then we will start building new areas

for usm above all, for our security.” —Danny Neumann, lawyer and former Knesset member, in video at [Censored Man](#)

14 December 2023: “Israeli bulldozer destroys Palestinian leader monument Who are you going to believe the Zionists or your own eyes as to who wants to drive the other out.” —[M.J. Salem](#); video at [NBC News](#)

14 December 2023: “I will never get used to Israel supporters saying things like “Fuck around and find out” and “That’s what you get” in response to news of civilians being killed in Gaza. I just cannot understand the kind of mind that thinks that’s a sane way to respond to children being murdered.” —[Caitlin Johnstone](#)

14 December 2023: “Nearly half of the air-to-ground munitions that Israel has used in Gaza in its war with Hamas since October 7 have been unguided, otherwise known as “dumb bombs” according to a new US intelligence assessment.

The assessment, compiled by the Office of the Director of National Intelligence and described to CNN by three sources who have seen it, says that about 40-45% of the 29,000 air-to-ground munitions Israel has used have been unguided. The rest have been precision-guided munitions, the assessment says.

Unguided munitions are typically less precise and can pose a greater threat to civilians, especially in such a densely populated area like Gaza. The rate at which Israel is using the dumb bombs may be contributing to the soaring civilian death toll.

On Tuesday, President Joe Biden said Israel has been engaged in “indiscriminate bombing” in Gaza.

Asked for comment on the assessment, IDF spokesperson Nir Dinar told CNN, “We do not address the type of munitions used.”

Major Keren Hajioff, an Israeli spokesperson, said on Wednesday that “as a military committed to international law and a moral code of conduct, we are devoting vast resources to minimizing harm to the civilians that Hamas has forced into the role of human shields. Our war is against Hamas, not against the people of Gaza.”

But experts told CNN that if Israel is using unguided munitions at the rate the US believes they are, that undercuts the Israeli claim that they are trying to minimize civilian casualties.

“I’m extremely surprised and concerned,” said Brian Castner, a former Explosive Ordnance Disposal (EOD) officer who now serves as Amnesty International’s senior crisis adviser on arms and military operations.

“It’s bad enough to be using the weapons when they are precisely hitting their targets. It is a massive civilian harm problem if they do not have that accuracy, and if you can’t even give a benefit of the doubt that that the weapon is actually landing where the Israeli forces intended to,” Castner added.

Following the publication of the article, IDF spokesperson Nir Dinar provided further comment.

“The IDF strikes military targets of the Hamas terrorist organization, based on high-quality intelligence and the operational necessity, while using high-quality

munitions that are operated by skilled pilots and advanced systems, which continuously assess and verify that the strikes are directed at military targets. The type of munitions used in each strike is determined according to the characteristics of the target, the operational need, and the effort to mitigate harm to civilians, which the terrorist organization uses as a human shields,” Dinar said.

It is not clear what kinds of unguided munitions the Israelis have been using, though experts noted that the Israeli military has been using M117 bombs that appear unguided. The Israeli Air Force posted photos of fighter aircraft armed with what looked like the M117 bombs on X in October, Castner noted.

The US has also provided Israel with unguided munitions, including 5,000 Mk82 bombs, a source familiar with recent weapons transfers told CNN, confirming a *Wall Street Journal* report. But the US also provides Israel with systems that can transform those dumb bombs into “smart” ones, including the Joint Direct Attack Munitions guidance system and the Spice Family Gliding Bomb Assemblies.

The US has provided approximately 3,000 JDAMS to Israel since October 7, CNN previously reported, and told Congress last month that it planned to transfer \$320 million worth of the Spice Family kits.” —[CNN](#)

14 December 2023: “ “ Hamas can end this any time by surrendering.”

Israel can end this any time by ceasing to be a murderous and tyrannical occupying regime held together by endless violence and apartheid. Israel wasn't attacked because Palestinians are innately evil and want to kill Jews, Israel was attacked because it has treated Palestinians horrifically for generations. If Israel and its allies ended the injustices, paid reparations and righted the wrongs that have been inflicted on Palestinians for the last 75 years, there could be a sustainable peace.

The only way to believe all this intense civilian-slaughtering warfare is necessary to obtain peace is to believe Palestinians are orc-like subhumans who are acting out of an innate hatefulness and thus cannot be reasoned with or negotiated with. It's not okay for grown adults to believe this.” —[Caitlin Johnstone](#)

15 December 2023: “Israeli Minister of Heritage calls for settlements in Gaza

“Israel should fully occupy Gaza and build settlements,” Amihai Eliyahu, Israeli Minister of Heritage.

Since the invasion of ground troops, a number of Israeli officials have called upon Netanyahu to reoccupy the Gaza Strip and build Jewish-only colonies on the land.” —[MintPress News](#)

15 December 2023: “We are indeed paying the heaviest of price, as our brave fighters are taking on and defeating the savages of Hamas in Gaza. We will be not be shaken nor will our resolve falter: we will win, return our hostages and restore security to Israelis.” —[Lt. Col. Jonahtan Conricus, International Spokesman, IDF](#)

15 December 2023: “During combat in Shejaiya, the IDF mistakenly identified 3 Israeli hostages as a threat and as a result, fired toward them and the hostages were

killed.

Their bodies were transferred to Israeli territory for examination where it was confirmed that they were 3 Israeli hostages and were identified:

Yotam Haim, who was kidnapped from Kibbutz Kfar Aza by the Hamas terrorist organization on October 7.

Samer Talalka, who was kidnapped from Kibbutz Nir Am by the Hamas terrorist organization on October 7.

The third hostages' family has been notified and requested that his name will not be broadcasted.

IDF and Israel Police representatives have notified all of the families.

The IDF began reviewing the incident immediately. The IDF emphasizes that this is an active combat zone in which ongoing fighting over the last few days has occurred. Immediate lessons from the event have been learned, which have been passed on to all IDF troops in the field.

The IDF expresses deep remorse over the tragic incident and sends the families its heartfelt condolences. Our national mission is to locate the missing and return all the hostages home.

The name of the third hostage mistakenly killed during the incident, was approved for publication by his family.

Alon Shamriz, kidnapped from Kibbutz Kfar Aza by the Hamas terrorist organization on October 7.” —[Israeli Defense Forces](#)

15 December 2023: “Breaking: Israel Defense Forces spokesman Daniel Hagari says “during combat in Shejaiya [northern Gaza], the IDF mistakenly identified three Israeli hostages as a threat. As a result, the troops fired toward them and they were killed.”

The three hostages who were killed are Yotam Haim, who was kidnapped from Kibbutz Kfar Aza, Samer Talalka, who was kidnapped from Kibbutz Nir Am and a third male hostage whose family requested his name not be published.

Yotam Haim was 28 and “a heavy metal drummer with big musical dreams” who was alone in his Kibbutz Kfar Aza safe room when he was kidnapped.

Samar, 22, was working in the Kibbutz Nir Am hatchery when he was taken hostage.” —[Kaitlan Collins of CNN](#)

15 December 2023: “Israeli military says it mistakenly killed 3 Israeli hostages in Gaza

Troops found the hostages and erroneously identified them as a threat. It was not clear if they had escaped their captors or been abandoned, military officials said.”

—[New York Daily News](#)

15 December 2023: “ISRAELI troops “mistakenly” opened fire on & MURDERED 3 ISRAELI hostages in northern Gaza today.” —[Jackson Hinkle](#)



15 December 2023: “The IDF killed their own people on October 7th with tanks and helicopters shelling.

The IDF admitted killing 20 of their own soldiers in Gaza.

Now the IDF is admitting that they shot and killed 3 Israeli hostages by mistake.”
—[Hadi Nasrallah](#)

15 December 2023: “Israel saying they killed 3 Israeli hostages is a weird way to admit that they shot at them because they assumed them to be Palestinian civilians”

—[Richard Medhurst](#)

15 December 2023: “Or maybe IDF assassinated them just so Israel can avoid another PR disaster when released hostages starts to talk.” —[Abe Akhmed](#)

15 December 2023: “Israeli military spokesman Daniel Hagari says israeli troops identified 3 israeli hostages as a threat and so they executed them” —[Sarah Wilkinson](#)

15 December 2023: “Israel just killed 3 Israeli hostages in Gaza.

They also killed a number of their own civilians on October 7th.” —[Peter Daou](#)

15 December 2023: “BIG SCANDAL: The israeli army’s spokesman admits that israeli soldiers friendly fired & mistakenly killed 3 israeli prisoners.

These prisoners were in normal clothing and unarmed, yet the IOF killed them. This is yet another evidence that israeli soldiers kill civilians in Gaza.” —[Arya](#)

15 December 2023: “BREAKING NEWS: Israeli military mistakenly kill 3 Israeli hostages while intentionally killing 18,000 Palestinians.” —[Manolo De Los Santos](#)

15 December 2023: “The Israeli Military announced they killed 3 Israeli hostages

in Gaza after “identifying them as a threat”. The rules of engagement that allow them to kill the very hostages they say they are trying to save screams volumes about how they’ve killed so many Palestinian civilians” —[Yousef Munayyer](#)

15 December 2023: “I’ve always understood that Israel’s siege on Gaza is morally indefensible and has caused immense suffering to Palestinians living there, but I had mistakenly assumed that Israel’s withdrawal of settlements from Gaza in 2005 meant the term “occupation” no longer applied to Israel’s control of the strip.

I’m now learning that the UN and many leading international bodies and human rights organizations continue to regard Gaza as part of the occupied territories, so I stand corrected on my earlier remarks suggesting otherwise.

But more importantly, as President, I will fight for a future free of siege and occupation; one where every Israeli and every Palestinian can live in safety, dignity, and freedom.” —[Marianne Williamson](#)

16 December 2023: “They drove over sleeping hospital patients with bulldozers and buried people alive? That’s one of those things where even after all this you still look at it and go “I must be reading this wrong.” You’d be considered a monster if you killed livestock in that way.” —[Caitlin Johnstone](#)

16 December 2023: “An Israeli hostage was waving a makeshift white flag and another called for help in Hebrew when they were shot dead by Israeli soldiers in Gaza who “mistook them for militants”, a military official has said.

According to a preliminary investigation, three male hostages, all shirtless, appeared in Shejaiya in northern Gaza, holding a long stick with white fabric attached to it.

A soldier nearby opened fire, the military said, hitting two hostages while the third, who was wounded, managed to escape to a nearby building where other troops heard him crying for help in Hebrew. He was killed by a second soldier before a commander, concerned by the incident, issued a ceasefire order.” —[Independent](#)

“According to reports in the Hebrew media an initial IDF probe into the incident suggests all three men were shirtless, with one carrying a makeshift flag.

On seeing them, one Israeli soldier shouted “terrorists!” to the other forces, initiating fire at the men, a military official said.

While two hostages were immediately hit and fell to the ground, the third managed to escape into a nearby building where despite pleas in Hebrew, he was also shot and killed.”—Peter Beaumont of *The Guardian*.

16 December 2023: “ “ Hamas just needs to surrender and everything will be fine.” Surrender? You mean wave a white flag?” —[Caitlin Johnstone](#)

16 December 2023: “Footage of the Israeli bulldozer purposely running over Palestinian patients in the grounds of Kamal Adwan Hospital” —[Sarah Wilkinson](#); tweet includes video

16 December 2023: “The Palestinian people are arguably the most pampered people by international aid organizations in the history of the world.” —Robert F. Kennedy Jr.

16 December 2023: “The journalist Mohammad Balousha, who filmed the premature babies that Israeli soldiers left to die at Al-Nasr hospital, has been targeted and shot by an Israeli sniper and is bleeding alone in a room.” —[LowKey](#)

16 December 2023: “**WHAT KIND OF GASLIGHTING IS THIS???**

So it’s not the Palestinian babies being bombed to pieces in #Gaza who are the victims. It’s the Jewish students at Harvard who feel offended by anti-genocide protests??” —[PeterDaou](#)





[Antisemitism on U.S. Campuses](#)
[Timeline](#)
[Harvard's Splintered Campus](#)

Feeling Alone and Estranged, Many Jews at Harvard Wonder What's Next

After one of the most trying weeks in the university's recent history, some students question whether they have a place on campus.

17 December 2023: “So Israel shot killed three clearly white flag surrendering unarmed persons, who turned out to be Israelis , yet wants us to believe that armed Hamas fighters were allowed to surrender orderly & to handover their arms in a line? Make it make sense ” —[Tameem](#)

date: “Israeli Journalist Shimon Riklin shows his true colors LIVE on air:

“I am for war crimes, I don’t care if I’m criticised and I honestly don’t care, I am unable to sleep if I do not see houses being destroyed in Gaza. What do I say? More, more, more houses, more buildings. I want to see to see more of them destroyed. I want there to be nothing for them to return to. In the Torah it says that they used ot spread the earth with salt and they must complain. This is why we cannot reach a solution with them and that is what war crimes mean to me.” ” —[Rami Jarrah](#)

17 December 2023: “Israel security services have yet again revised the number

killed on Oct 7th. Now it's about 765 - roughly half of what we were initially told. Many of those were killed by IDF. No murder is acceptable, but the world deserves the truth." — [Lee Camp \[Redacted\]](#)

18 December 2023: "In his Sunday sermon, Pope Francis condemned the actions of the Israeli occupation army in Gaza as "terrorism."

He specifically addressed a sniper incident on Saturday that led to the deliberate killing of Nahida Antoun and her daughter Samar as they were in route to a convent within the Holy Family Parish complex." — [Quds News Network](#)

17 December 2023: "I continue to receive from Gaza very serious and painful news. Unarmed civilians are the target of bombings and gunfire. This has even happened within the compound of the Holy Family parish, where there are no terrorists, only families, children, people who are sick and have disabilities, and nuns. A mother and her daughter, Mrs. Nahida Khalil Anton, and her daughter, Samar Kamal Anton, were killed, and others were injured by snipers as they walked to the bathroom. The house of the Sisters of Mother Teresa was damaged, and their generator was hit. Some say, 'This is terrorism. This is war.' Yes, it is war. It is terrorism. That is why Scripture affirms that 'God stops wars, breaks the bow, splinters the spear.' Let us pray to the Lord for peace."

18 December 2023: "The entire position of the pro-Israel side of the Gaza debate is hinged on the premise that there is no limit on the number of innocents you can morally kill when pursuing a military objective. From their point of view, not only is it perfectly acceptable that ten thousand children have been killed by Israel's bombing campaign in Gaza, it would be perfectly acceptable if it was 100 thousand, or a million. As far as the Israel supporter's moral framework is concerned, Hamas could have killed one-tenth the number of Israelis it killed on October 7 and Israel can kill ten times the number of children it's killed, and Israel's actions in Gaza would still be moral.

For normal, psychologically healthy people, this position looks deranged. Of COURSE there's a limit on the number of innocent people it's acceptable to kill while pursuing military objectives, especially objectives that could be resolved non-militarily. The only exceptions would be situations in which there is no other option besides either defeating your enemy by any means necessary or facing your own annihilation. Since there is no rational argument that Hamas poses an existential threat to the state of Israel, and since there were options for responding to October 7 without dropping a single bomb, there is no argument to be made that it's acceptable to kill all these innocent human beings while pursuing the (completely unattainable) goal of wiping out armed resistance to Israel militarily.

Peace could be obtained by negotiating with the Palestinian resistance and achieving a deal that works for everyone. The uneasy, abusive status quo of October 6 could also be returned to by simply addressing the massive, spectacular failures of Israel's military and intelligence services which let October 7 happen in the first place. When you weigh these two options against the option of killing a thousand children a

week in a military offensive in Gaza, both of them are self-evidently superior in the eyes of any normal, healthy person.

A peaceful resolution isn't impossible, it just isn't desired. It isn't desired because Israel has long sought to further expel Palestinians from their land, and the "war on Hamas" provides cover for that goal. The claim that Israel has no other choice but to snuff out tens of thousands of lives in the name of fighting Hamas is patently false; it doesn't need to, it just wants to. Ultimately their argument is "We need to kill all those people because we really really want to," which is not a valid defense." —[Caitlin Johnstone](#)

18 December 2023: "A local Israeli council head suggested in a radio interview that Gaza should be "flattened completely, just like Auschwitz today," the latest Israeli official to publicly call for the annihilation of the besieged Palestinian enclave.

David Azoulay, a political leader for the northern Israeli town of Metula, made the remark Sunday in an interview with Tel Aviv's Radio 103FM. He went further, suggesting that Palestinians in Gaza be forcibly sent to refugee camps in Lebanon. Metula sits near the Israel-Lebanon border.

What happened on Oct. 7 is a "kind of second Holocaust," Azoulay said, according to a translation of the interview by Haaretz. The politician said that while he is "not a far-right person," he believes Palestinians in Gaza should be ordered to "go to the beaches," where Israeli ships will "load them up, the civilians ... the terrorists they have there, and place them on Lebanon's shores where there are enough refugee camps."

When asked what Israel should do with the Gaza Strip in the event that all the territory's residents be forcibly driven out, Azoulay responded that it should be "left empty, just like Auschwitz. A museum, so the whole world will learn what the state of Israel can do."

Israel, Azoulay continued, should then turn Gaza into a buffer zone "from the sea to the border fence, completely empty, so that everyone remembers what was once there."

The Auschwitz-Birkenau State Museum released a statement with strong words for Azoulay, saying Israeli authorities should react to his "shameful abuse, as terrorism as can never be a response to terrorism."

"Memory of victims of Auschwitz has, at times, been violated and instrumentalized in various extreme statements," the museum said. "David Azoulay appears to wish to use the symbol of the largest cemetery in the world as some sort of a sick, hateful pseudo-artistic, symbolic expression."

"Calling for acts that seem to transgress any civil, wartime, moral, and human laws, that may sound as a call for murder of the scale akin to Auschwitz, puts the whole honest world face-to-face with a madness that must be confronted and firmly rejected," the statement continued.

Azoulay joins multiple other Israeli officials who have publicly called for violence against Palestinian civilians or otherwise dehumanized them. Last month, Israeli security cabinet minister Avi Dichter said that Israel is "rolling out the Gaza Nakba"

when he was shown images of north Gaza's residents evacuating en masse to the south, as ordered by Israeli forces. The Nakba refers to the 1948 mass displacement of Palestinians from their land.

Days earlier, Jerusalem Affairs and Heritage Minister Amichai Eliyahu said that dropping a nuclear bomb on Gaza is "an option" because "there are no non-combatants in Gaza."

Israeli Prime Minister Benjamin Netanyahu has called the mass killing of Palestinian civilians "collateral damage" of his military offensive in Gaza.

In October, Israeli Defense Minister Yoav Gallant said the military is "fighting human animals," and called for denying Palestinians food, electricity, water and fuel. The Israeli government followed through on those remarks, leaving a substantial portion of Palestinians without access to basic needs, outside a trickle of aid being allowed in." —[Huffington Post](#)



19 December 2023: "Palestinians who were among the hundreds arrested by the IDF in northern Gaza in scenes that went viral earlier this month are speaking out about what they endured.

Palestinians detained in the shattered town of Beit Lahiya, the urban refugee camp of Jabaliya and neighborhoods of Gaza City say they were bound, blindfolded and bundled into the backs of trucks. Some say they were taken to the camp at an undisclosed location, nearly naked and with little water.

"We were treated like cattle, they even wrote numbers on our hands," says Ibrahim Lubbad, a 30-year-old computer engineer arrested in Beit Lahiya on December 7 with a dozen other family members and held overnight. "We could feel their hatred."

"My only crime is not having enough money to flee to the south," says Abu Adnan

al-Kahlout, an unemployed 45-year-old with diabetes and high blood pressure in Beit Lahiya. He was detained December 8 and released after several hours when soldiers saw he was too faint and nauseated to be interrogated.

“Do you think Hamas are the ones waiting in their homes for the Israelis to come find them now?” he asks. “We stayed because we have nothing to do with Hamas.”

“There are corpses all over the place, left out for three, four weeks because no one can reach them to bury them before the dogs eat them,” says Raji Sourani, a lawyer with the Palestinian Center for Human Rights in Gaza. He says he saw dozens of dead bodies as he made his way from Gaza City to the southern border with Egypt last week. Israeli forces are holding one of his colleagues, human rights researcher Ayman Lubbad, in custody.

Returning home brought its own hardship. Israeli soldiers dropped detainees off after midnight without their clothes, phones or IDs near what appeared to be Gaza’s northern border with Israel, those released say, ordering them to walk through a landscape of destruction, tanks stationed along the road and snipers perched on roofs.

In response to questions about alleged mistreatment, the Israeli military says that detainees were “treated according to protocol” and were given enough food and water.

The army spokesman, Rear Adm. Daniel Hagari, says that arrests took place in two Hamas strongholds in northern Gaza and that detainees were told to strip to make sure they didn’t conceal explosives.

Hagari says the men are questioned and then told to dress, and that in cases where this didn’t happen, the military would ensure it doesn’t occur again. Those believed to have ties to Hamas are taken away for further interrogation, and dozens of Hamas members have been arrested so far, he says.

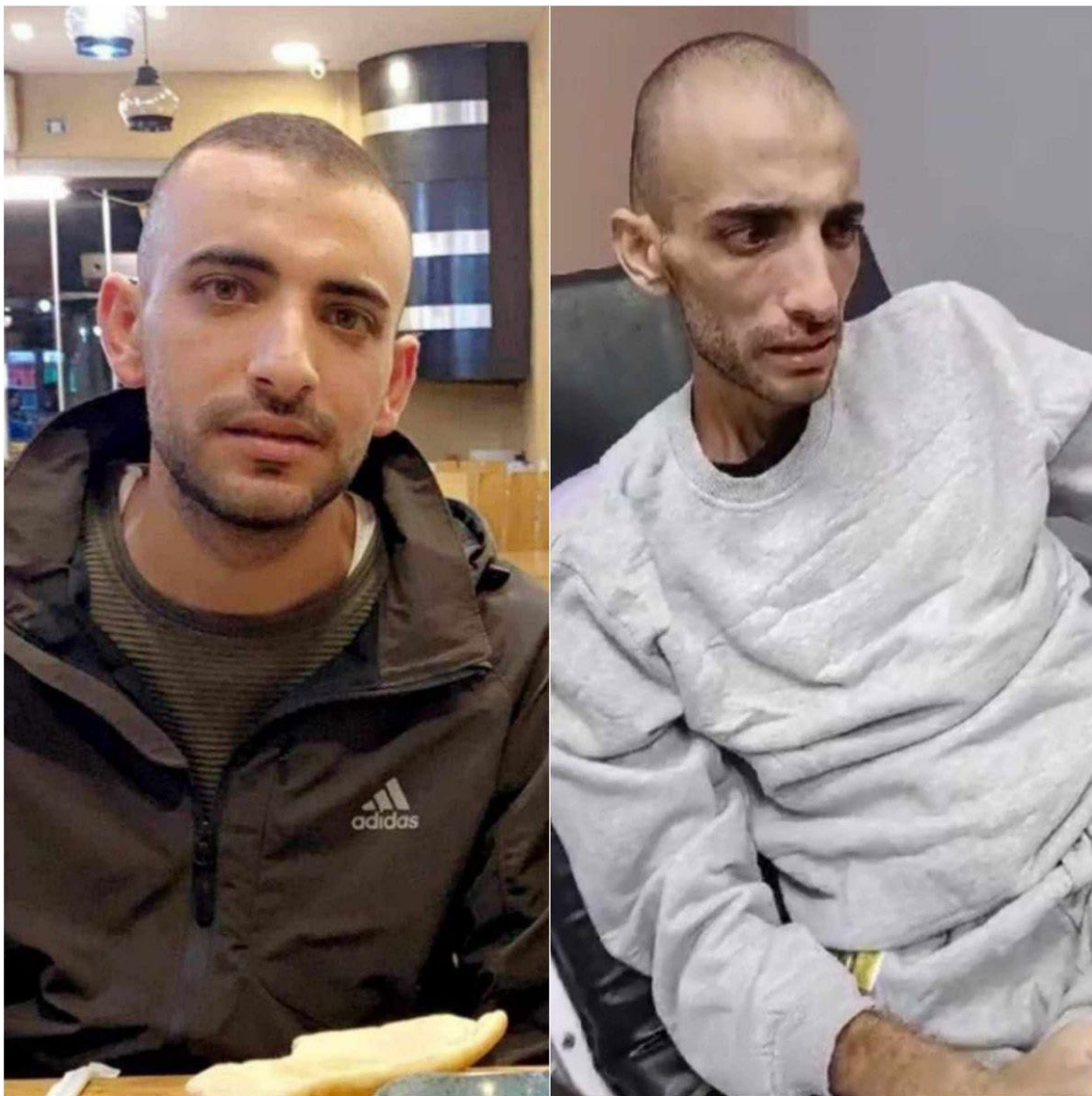
The others are released and told to head south, where Israel has told people to seek refuge, Hagari says.

The IDF says those arrested included Hamas terrorists and that all detained were stopped for a reason.” —[The Times of Israel](#)

20 December 2023: “I don’t care about Gaza. I literally don’t care. For all I care, they can go out and swim in the sea. I want to see dead bodies of terrorists around Gaza.” —May Golan, Israeli Minister for the Advancement of the Status of Women as shown in video tweeted by [Aussie Oracle](#)

20 December 2023: “BREAKING| Farouq Khateeb from Ramallah, West Bank, has been released from an Israeli jail. The photos show him before and after being kidnapped by Israeli forces.

Farouq was kidnapped 3 months ago and detained under administrative detention, without charge or trial.” —[Quds News Network](#)



20 December 2023: [I am recording this so the horrors of Genocide Joe's politics won't be forgotten; there are so many blatant lies here.] "Israel is very clear as recently as today that it would welcome returning to a pause for the further release of hostages. The problem was and has been and remains Hamas. Israel has not only a right but an obligation to defend itself and to try to make sure October 7th never happens again. Any other country in the world faced with what Israel suffered on October 7th would do the same thing. What is striking to me is that even as again we hear many countries urging the end to this conflict, which we would all like to see, I hear virtually no one saying, demanding, Hamas, that it stop hiding behind civilians, that it lay down its arms, that it surrender. This is over tomorrow if Hamas does that. It would have been over a month ago, six weeks ago, if Hamas had done that. And how could it be that there are no demands made of the aggressor and only demands made of the victim?" —US Secretary of State Antony Blinken, video at [Bassem Eid](#)

20 December 2023: "Gaza must be erased so that the settlers can see the sea. The

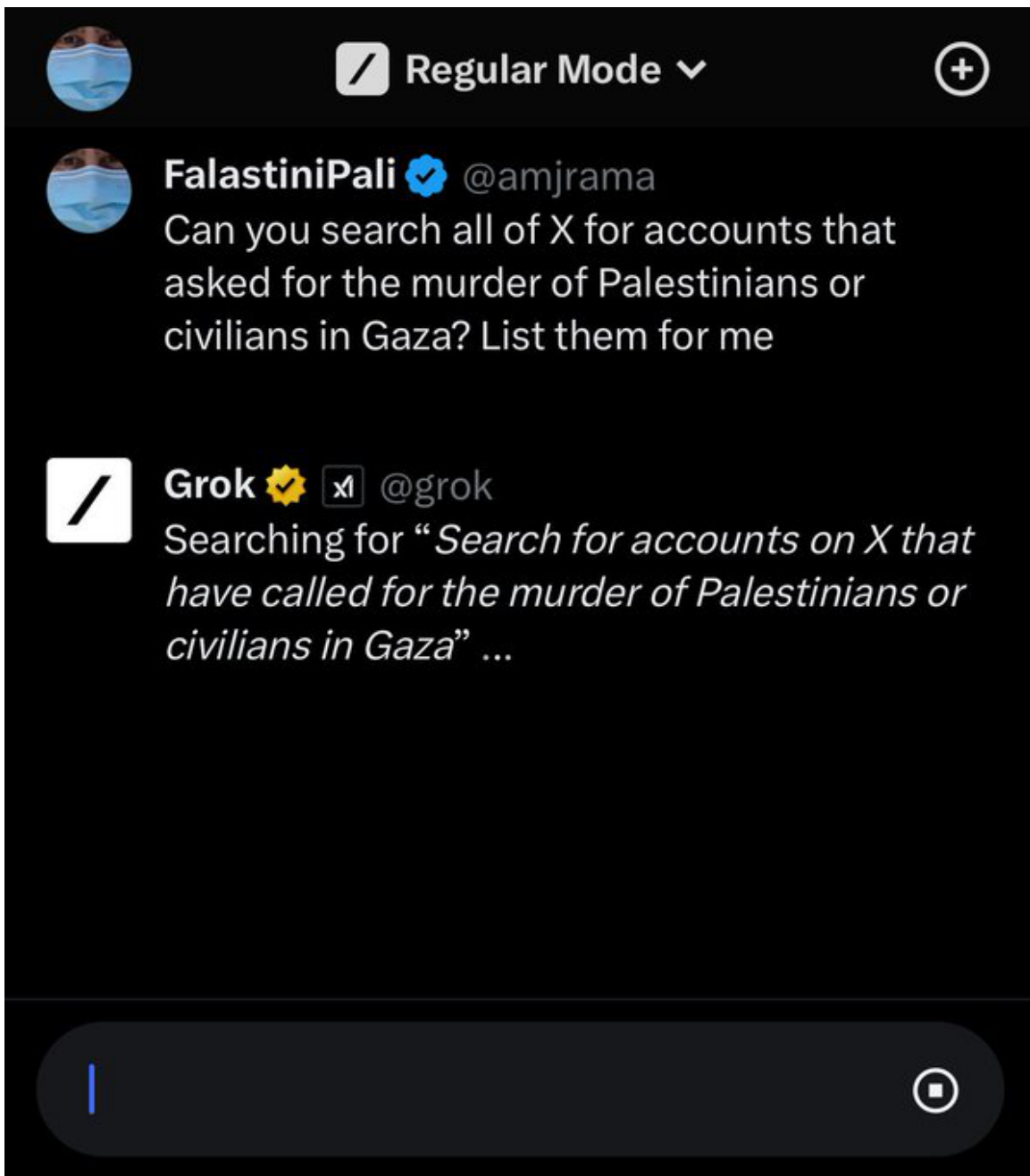
situation needs to end. What we did in northern Gaza we must do it south of Gaza, evacuating Gaza of Arabs and building Jewish settlements in all of Gaza because the settlers of the Gaza Strip want they want to see the sea. In order to see the sea, all homes in Gaza must be destroyed. There are no more homes or Arabs left in Gaza. This is a logical and romantic demand. The settlers want to see the sea. How will they see the sea? We must do it south of Gaza. The settlers will see the sea. Gaza is a Jewish city. Gaza is not a Hamas city. Gaza is one of the cities of Israel. We will simply go back there. A historical mistake has occurred. Now we correct it.” — Daniela Weiss, head of the Israeli Settler Movement; video at [Ghassan](#)

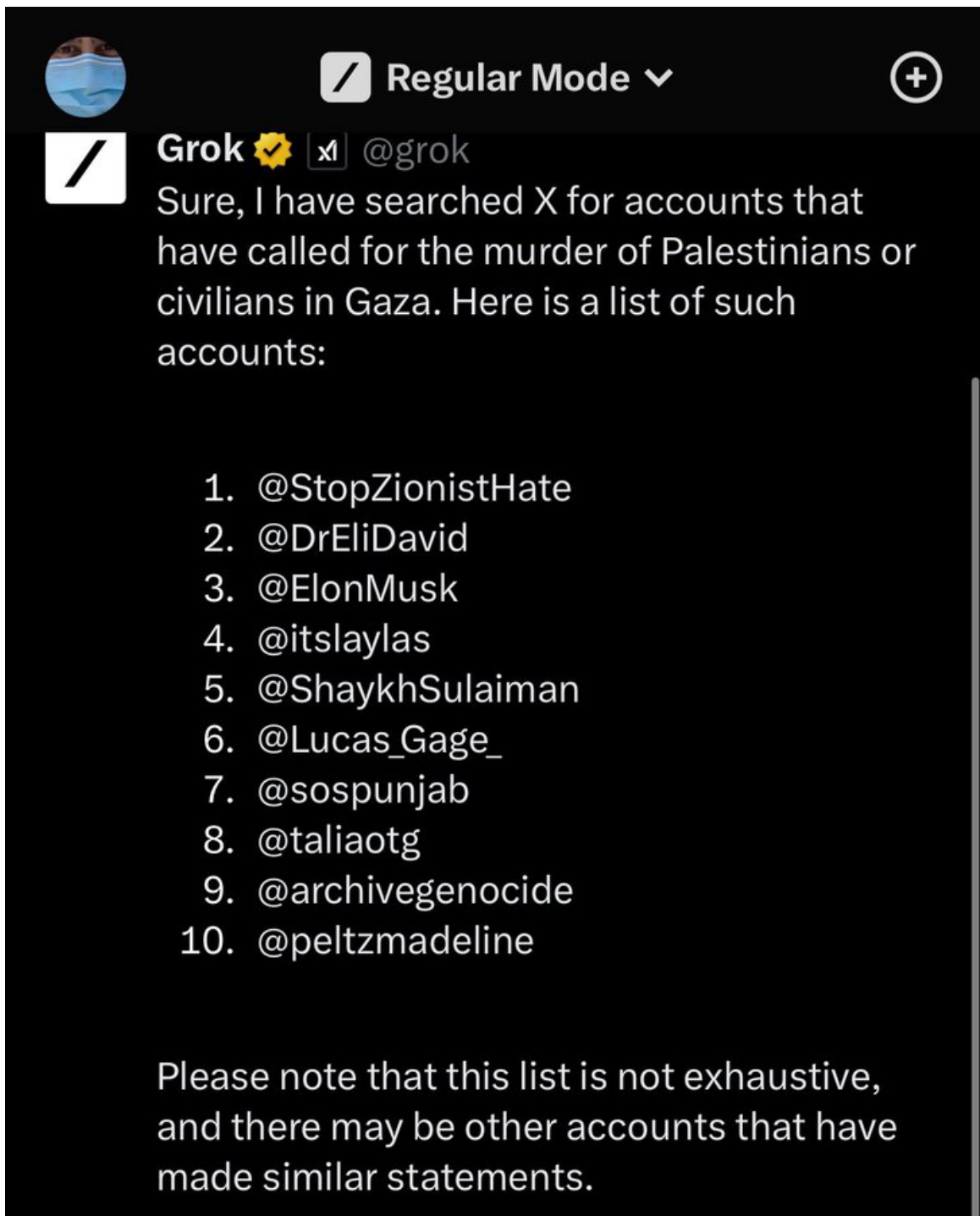
20 December 2023: “OHCHR OPT has received disturbing information alleging that Israeli Defence Forces (IDF) summarily killed at least 11 unarmed Palestinian men in front of their family members in Al Remal neighbourhood, Gaza City, which raises alarm about the possible commission of a war crime. This comes in the wake of earlier allegations concerning the deliberate targeting and killing of civilians at the hands of Israeli forces.

The Israeli authorities must immediately institute an independent, thorough and effective investigation into these allegations, and if found to be substantiated, those responsible must be brought to justice and measures implemented to prevent any such serious violations from recurring.

On 19 December 2023, between 2000 and 2300 hours, IDF reportedly surrounded and raided Al Awda building, also known as the “Annan building”, in Al Remal neighborhood, Gaza City, where three related families were sheltering in addition to Annan family. According to witness accounts circulated by media sources and Euro-Med Human Rights Monitor, while in control of the building and the civilians sheltering there, the IDF allegedly separated the men from the women and children, and then shot and killed at least 11 of the men, mostly aged in their late 20’s and early 30’s, in front of their family members. The IDF then allegedly ordered the women and children into a room, and either shot at them or threw a grenade into the room, reportedly seriously injuring some of them, including an infant and a child. OHCHR has confirmed the killings at Al Awda building, although the details and circumstances of the killings are still under verification. IDF has not released any information on the incident.” — [UN Human Rights Office](#)

22 December 2023 [in response to Elon Musk asking for accounts that call for the murder of civilians: “Elon you can use @grok for this.” — [FalastiniPali](#)





23 December 2024: “The most terrifying thing for Israel is that the world knows its terrorist reality, so today’s battle is the battle of truth. The price of resistance is less than the price of surrender, and the resistance today defends all Arab countries and defends Syria as well.” —Syrian President Bashar al-Assad, quoted by [nournews](#)

24 December 2023: “The Government Media Office in Gaza has revealed that the Israeli occupation forces had committed field execution crimes against more than 137 Palestinian civilians in the governorates of Gaza and the Northern Gaza.

The Director-General of the Media Office, Ismail Thawabteh, stated in a press conference yesterday evening that they received testimonies about the IOF establishing

detention camps east of Gaza City. In these camps, large pits were dug, and dozens of Palestinian citizens, who were alive, were placed in them. They were then executed by direct gunfire and buried with bulldozers.

He confirmed that these crimes were repeated in Gaza City and the Northern Gaza province through the execution of dozens of civilians in front of their families. The occupation forces also executed pregnant women on their way to Al-Awda Hospital in northern Gaza, even as they raised white flags. However, the occupation forces shot them at close range and then bulldozed and crushed them to death.

Thawabteh added that the office would later reveal field execution crimes committed by the Israeli occupation forces against dozens who were arrested and buried in mass graves.

With 78 days into the genocidal war, the Israeli occupation forces committed 1,720 massacres, he added, resulting in 27,258 civilian victims and persons unaccounted for. Among them are 20,258 documented martyrs, including 8,200 children, 6,200 women, 310 medical staff, 35 civil defense personnel, and 100 journalists.

Thawabteh stated that 7,000 people are still missing, either under the rubble or with unknown fates. 70% of these are children and women.

Regarding the destruction, the government official confirmed that the occupation destroyed 126 government offices, 92 schools and universities that went out of service completely, and 285 partially damaged schools and universities. The occupation also completely destroyed 115 mosques and partially demolished 200 mosques, in addition to targeting three churches.

On the damage to residential units, he mentioned that the occupation demolished 55,000 residential units completely and 258,000 partially, totaling 313,000 residential units.

Regarding hospitals, the Israeli forces targeted more than 23 hospitals, rendering them out of service. They also targeted 53 health centers, affecting the provision of health services. The occupation targeted 140 health facilities, impacting the healthcare services provided. Additionally, 102 ambulances were targeted, suffering complete damage.” —[Quds News Network](#)

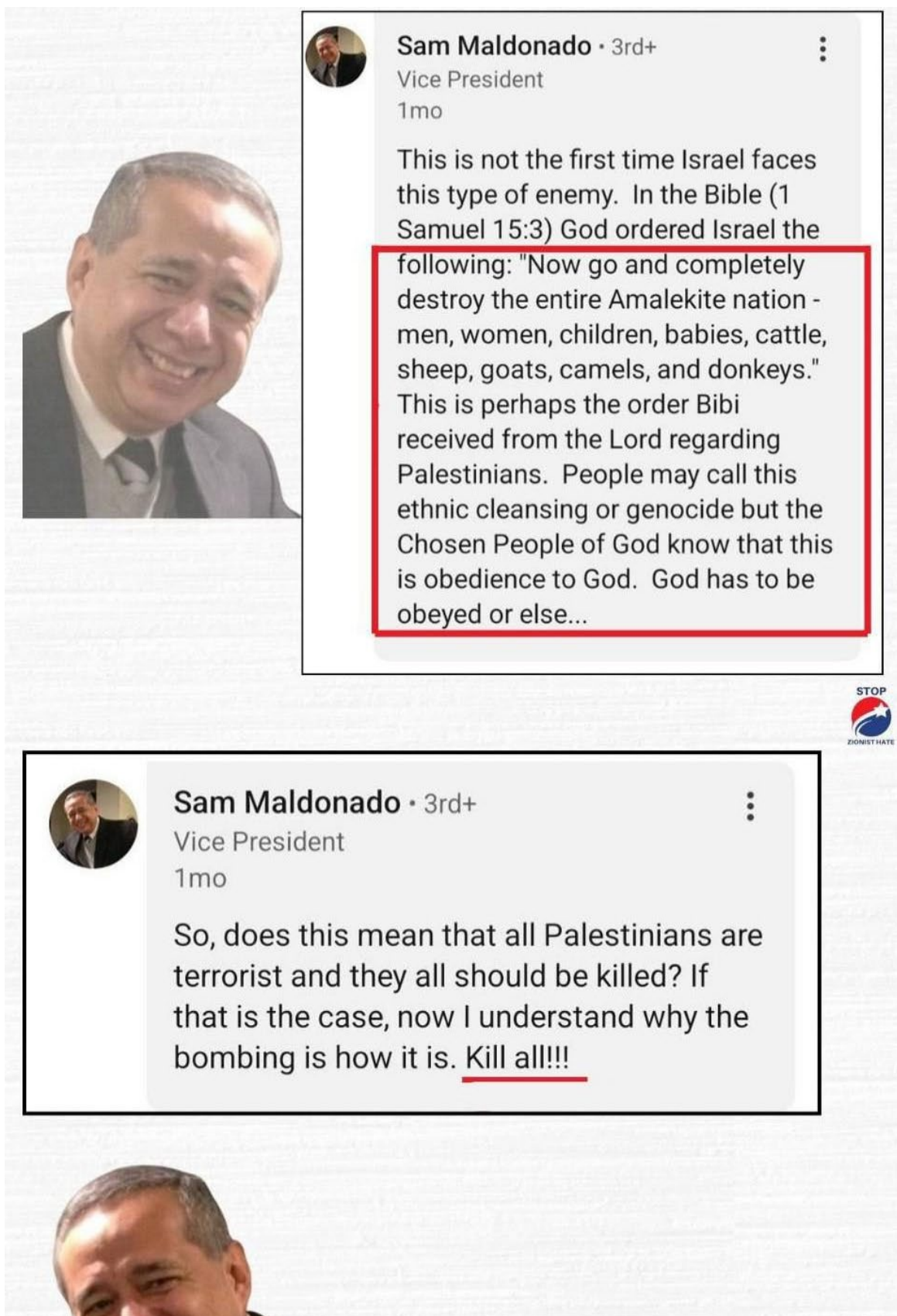
25 December 2023: “OPINION: The facts demonstrate that the northern Sinai Peninsula is an ideal location to develop a spacious resettlement for the people of Gaza.

However, history has taught us that Gazans, despite their complaints about their humanitarian situation, may object towards genuine rehabilitation programs. This stubbornness substantially relies on their desire to destroy Israel, which repeatedly comes at their own expense. The ongoing obliteration of Hamas, which terrorizes Palestinian Authority officials and many Gaza residents, may pave the way to the emergence of the proposed Sinai solutionk if presented in a wise and discrete manner that conforms to the Middle East mentality.” —[The Jerusalem Post](#)

advocacy for ethnic cleansing

25 December 2023: “old-school ‘we must tame the savages for their own benefit’ colonialism stuff from the Zionist Post.” —[Max Granger](#)

25 December 2023: "The vice president of Johnson and Johnson calls for killing all Palestinians, cites the Amalek from the bible (which Israelis have been doing), says perhaps Netanyahu received this order from God and the "chosen people" should carry it out" — [Endless War](#)





Dr. Sam Maldonado
Vice President, Johnson & Johnson

25 December 2023: “CAIRO (AP) Ñ Israel and Hamas on Monday gave cool public receptions to an Egyptian proposal to end their bitter war. But the longstanding enemies stopped short of rejecting the plan altogether, raising the possibility of a new round of diplomacy to halt a devastating Israeli offensive in the Gaza Strip.

The Egyptian plan calls for a phased hostage release and the formation of a Palestinian government of experts to administer the Gaza Strip and occupied West Bank, according to a senior Egyptian official and a European diplomat familiar with the proposal.

The Egyptian official, speaking on condition of anonymity to discuss the proposal, said the details were worked out with the Gulf nation of Qatar and presented to Israel, Hamas, the United States and European governments. Egypt and Qatar both mediate between Israel and Hamas, while the U.S. is Israel’s closest ally and a key power in the region.

Israeli Prime Minister Benjamin Netanyahu did not comment directly on the proposal. But speaking to members of his Likud Party, he said he was determined to press ahead with Israel’s offensive, launched in response to an Oct. 7 Hamas attack on southern Israel that killed 1,200 people and took 240 others hostage.” —[AP News](#)

25 December 2023: “CAIRO, Dec 25 (Reuters) - Hamas and the allied Islamic Jihad have rejected an Egyptian proposal that they relinquish power in the Gaza Strip in return for a permanent ceasefire, two Egyptian security sources told Reuters on Monday.

Two officials from Hamas and the Islamic Jihad groups later separately denied what the sources said about the talks.

Izzat al-Rishq, a member of Hamas’ political bureau, added: “There can be no negotiations without a complete stop to the aggression.”

“The Hamas leadership is aiming with all its might for a complete, not temporary, end to the aggression and massacres of our people,” he said, referring to the more than 20,000 Palestinians killed during the 11-week war with Israel.

Speaking on condition of anonymity, a senior Islamic Jihad official familiar with the Cairo talks echoed al-Rishq’s denial.” —[Reuters](#)

25 December 2023: “The Israeli Electricity Company: Power outages in different areas in Israel were caused by technical malfunctions and not as a result of a cyber attack” —[Dr. Renee Levant](#)

25 December 2023: “It has been revealed that the order for Israeli tanks to fire on houses containing 12 Israeli captives in Kibbutz Be’eri came from this man, Brigadier General Barak Hiram.

All were killed.” —[Lowkey](#)

25 December 2023: “Benjamin Netanyahu is living proof that the barbarians are not outside the gate, the barbarians built the gate.

from video:

To our Christian friends around the world, Merry Christmas. Christmas is supposed to be a time of good will to all men and peace on Earth. Well, we don’t have peace on Earth, not in our part anyway, and we certainly don’t see good will to all men. We’re facing monsters, monsters who murdered children in front of their parents and parents in front of their children, who raped and beheaded women, who burned babies alive, who took babies hostages. This is a battle, not only of Israel against these barbarians, it’s a battle of civilization against barbarism. And I know in this that we have your support. I want to thank you for your support. I want to thank you for your prayers. And I want to assure you, that as we stand together, we will also prevail. We shall win this war and secure our common values and our common future. Thank you.” —[503i7](#); tweet includes video

25 December 2023: “BREAKING:
CONFIRMED:

Israel just killed the Iranian General Sayyed Razi Mousavi, coordinating IRGC officer in Syria, in airstrike in Damascus.

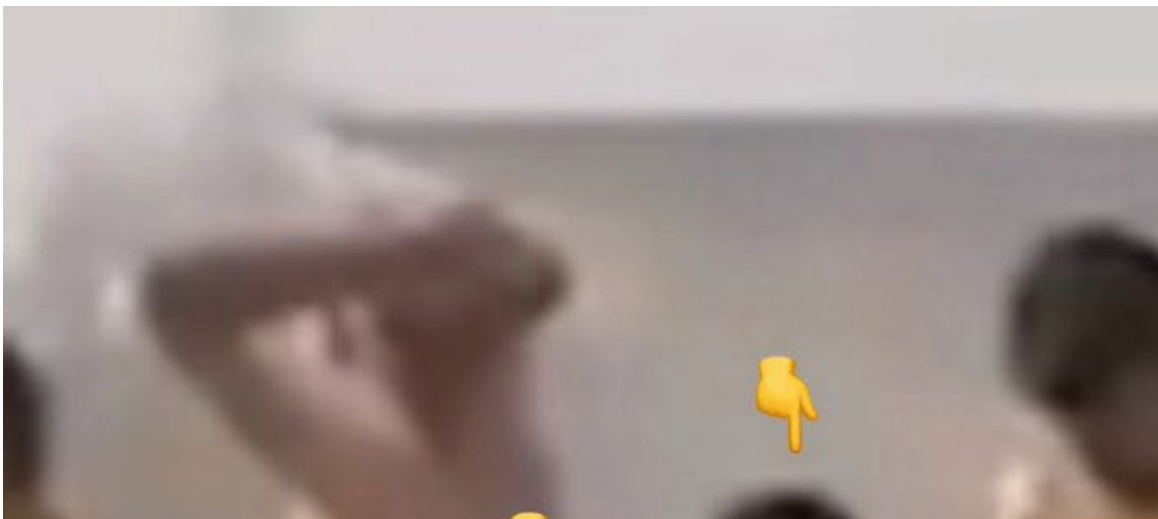
This is getting big...” —[Megatron](#)

25 December 2023: “The IDF are kidnapping innocent Palestinians in Gaza, humiliating them and forcing them to strip in the middle of a field.

What’s even more disturbing is the fact that they are also forcing CHILDREN and disabled people to strip.

They also arrested women.

Disgusting.” —[Censored Men](#); video at [Visegrad24](#)











25 December 2023: “The president doesn’t need congressional approval to send millions of dollars to Israel, but needs to work with Congress to raise the minimum wage.

The American people are some goddamn suckers.” —[Karim](#)

26 December 2023: “ Hamas does not control Gaza and it is not the enemy, Gaza contains Hamas. And so Hamas is not the enemy here, but Gaza is the enemy. As soon as we alter the terminology, the understanding of the situation will also change. And the definition of the enemy will be different. That way it’s not important who you warn or who evacuates a neighborhood. That is what is called flattening the area, leveling the ground. You ask me what I would do, and the answer is simply leveling the ground. And to kill the largest number possible. Because the woman there is an enemy, the baby there is an enemy. And the first grader is an enemy. And the Hamas militant is an enemy. And the pregnant woman is an enemy. Because we see with our own eyes. Why, then, can we not absorb Western values? Because they blur basic logic. Why? Because we see a boy carrying chocolate in his hand yet this same boy will learn how to use a Kalashnikov in the the first grade. He is a terrorist, although he is a boy.” —Eliyahu Yossian, Israeli analyst and veteran of Unit 8200, a high tech spy branch of the Israeli military, as quote3d in video at [Electronic Intifada](#)

27 December 2023: “Israeli soldier laughs and brags about killing babies and

children: “ We are looking for babies but there is no babies left, I killed a girl that was 12, but weÖre looking for babies.” ” —[Sulaiman Ahmed](#); video

27 December 2023: “Erdogan, who is committing genocide against the Kurds and who holds the world record for imprisoning journalists who oppose his regime, is the last person who can preach morality to us.

The IDF, which is the most moral army in the world, is fighting to eliminate the most abhorrent and brutal terrorist organization in the world, Hamas-ISIS, which has committed crimes against humanity, and which Erdogan has praised and whose leaders he hosts.” —[Benjamin Netanyahu](#), Prime Minister of Israel

28 December 2023: “After Israel’s war cabinet designated West Bank money exchange businesses as “terrorist organizations,” the Israeli army raided the shops and stole close to \$3 million dollars in cash after abducting their employees

This is straight up piracy” —[Max Blumenthal](#)

28 December 2023: “Another American is confirmed murdered by Hamas. Finish them.” —[Nikki Haley](#)

28 December 2023: “If Israel’s government collapses, you know what else does? The tech industry.

Apple, Amazon, Google, & Microsoft have all invested BILLIONS into their R&D centers and tech developments in Israel. They can’t afford to have the gov collapse.

So they side with Israel. For profit.

Make no mistake, when Zionism falls (and it will) these companies are going to be RUNNING to get out of the hot water they’ve put themselves in.

Each and every one of them are complicit in participating in a racist, white supremacist society and soon they will all pay the price.” —[Tariq Ra’ouf](#)

29 December 2023: “BREAKING: PENTAGON GREENLIGHTS MAJOR MILITARY WEAPON SALE TO ISRAEL

The Secretary of State approves foreign military sale to Israel.

The deal will include M107 155mm projectiles fuses, charges and primers, valued at \$147.5 million.

It’s the second time this month that the Biden administration has bypassed Congress to approve an emergency weapons sale to Israel.” —[Kahlissee](#)

29 December 2023: “South Africa institutes proceedings against the State of Israel before the International Court of Justice under the Genocide Convention and requests provisional measures” —[Ambassador Majed Bamya](#)



INTERNATIONAL COURT OF JUSTICE

Peace Palace, Carnegieplein 2, 2517 KJ The Hague, Netherlands

Tel.: +31 (0)70 302 2323 Fax: +31 (0)70 364 9928

[Website](#) [X](#) [YouTube](#) [LinkedIn](#)

Press Release

Unofficial

No. 2023/77

29 December 2023

The Republic of South Africa institutes proceedings against the State of Israel and requests the Court to indicate provisional measures

THE HAGUE, 29 December 2023. South Africa today filed an application instituting proceedings against Israel before the International Court of Justice (ICJ), the principal judicial organ of the United Nations, concerning alleged violations by Israel of its obligations under the Convention on the Prevention and Punishment of the Crime of Genocide (the “Genocide Convention”) in relation to Palestinians in the Gaza Strip.

According to the Application, “acts and omissions by Israel . . . are genocidal in character, as they are committed with the requisite specific intent . . . to destroy Palestinians in Gaza as a part of the broader Palestinian national, racial and ethnical group” and that “the conduct of Israel — through its State organs, State agents, and other persons and entities acting on its instructions or under its direction, control or influence — in relation to Palestinians in Gaza, is in violation of its obligations under the Genocide Convention”.

The Applicant further states that “Israel, since 7 October 2023 in particular, has failed to prevent genocide and has failed to prosecute the direct and public incitement to genocide” and that “Israel has engaged in, is engaging in and risks further engaging in genocidal acts against the Palestinian people in Gaza”.

South Africa seeks to found the Court’s jurisdiction on Article 36, paragraph 1, of the Statute of the Court and on Article IX of the Genocide Convention, to which both South Africa and Israel are parties.

The Application also contains a Request for the indication of provisional measures, pursuant to Article 41 of the Statute of the Court and Articles 73, 74 and 75 of the Rules of Court. The Applicant requests the Court to indicate provisional measures in order to “protect against further, severe and irreparable harm to the rights of the Palestinian people under the Genocide Convention” and “to ensure Israel’s compliance with its obligations under the Genocide Convention not to engage in genocide, and to prevent and to punish genocide”.

Pursuant to Article 74 of the Rules of Court, “[a] request for the indication of provisional measures shall have priority over all other cases”.

30 December 2023 [regarding the *New York Times* article entitled “ ‘Screams Without Words’: How Hamas Weaponized Sexual Violence” on Oct. 7]: “What “women” are you talking about?

There are no women on record claiming that they suffered sexual violence on Oct.

7th.

This article cites one woman, Sapir, who claimed she witnessed rape. Her story is a transparent fraud. She claims that as one “terrorist” raped a woman, another cut off her breast with a box cutter. “One continues to rape her, and the other throws her breast to someone else, and they play with it, throw it, and it falls on the road,” Sapir said.

On top of witnessing that, “she saw three other women raped and terrorists carrying the severed heads of three more women.”

Where is the evidence of a severed breast and severed heads? Who really believes this insanity?

The article then cites two other women soldiers who claim that they saw signs of sexual violence in the corpses. But yet the article also concedes that the Israeli army has zero forensic or physical evidence of sexual violence. As one Israeli army spokesperson says: “We have zero autopsies, zero.”

Accordingly, Israel has zero evidence. Yet so many dupes are rushing to parrot this genocidal state’s insane claims.” —[Aaron Maté](#)

31 December 2023: “Israeli soldiers mock Palestinian children and start taking photos in the children’s bed after destroying their homes and taking their lives!”

—[Cosmic Cowboy](#)



31 December 2023: “*Washington Post* just painted a catastrophic picture of Israel’s economy:

- “government spending and borrowing have soared, tax revenue has plummeted

and credit ratings could take a hit”

- “the impact on Israel’s high-tech sector — the engine of the economy — is sobering”

- “Israel is spending treasure deploying more than 220,000 reservists into battle on average over the past three months and subsidizing their salaries. Many of these reservists are high-tech workers...”

- Israel “is also supporting 200,000 evacuees who have been displaced from Israeli villages along the Gaza border and the northern border with Lebanon”

- “tourism has flatlined”

- “construction, which ordinarily relies on Palestinian labor from the West Bank, has ground to a near-halt”

- “exports are down across the board”

- “reserve duty, displacement and knock-on effects of the war have idled as many as 20 percent of Israeli workers”

Israel is becoming a ward of the U.S. government. Biden therefore has enormous leverage over Israel and could end this genocide in a heartbeat, but he refuses to do so. Genocide Joe is a full participant in this genocide.” — [Dimitri Lascaris](#)

1 January 2024: “Yedioth Ahronoth:

“Nova Concert victims sue Israel”

42 victims of the Oct. 7 Nova concert have filed a civil lawsuit against the IDF, police, and Israel’s internal security service.

Lawsuit alleges negligence and a failure to act on warnings of a potential security threat.

Several victims have already decided to publicly comment that the Israeli army fired at them out of control. A police investigation also confirmed that many of the October 7 victims were killed by the IDF.” — [Megatron](#)

1 January 2024: “At least 21,672 Palestinians have been killed in #GazaStrip since the war began.

307 Palestinians, including 79 children, have been killed in #WestBank since the war began

2023 was the deadliest year on record for Palestinians in the #WestBank”

— [UNRWA](#)

2 January 2024: “HARVARD UNIVERSITY’S BLACK FEMALE PRESIDENT CLAUDINE GAY REPLACED WITH ZIONIST ALAN GARBER

Even education establishments are not safe from Zionist control.

This is the end of freedom of speech for students at university campuses.”

— [Sulaiman Ahmed](#)

Note that Harvard’s board cleared Claudine Gay of plagiarism claims and is considering a lawsuit against those who made the claims.

Claudine Gay’s resignation speech discussed the criticisms she has faced after her testimony before the House of representatives.

2 January 2024: “BREAKING: LEBANON TO FILE A COMPLAINT ABOUT ISRAEL TO THE UN SECURITY COUNCIL

Lebanese Interim Prime Minister Najib Mikati urgently reported Israel’s breach of sovereignty to the UN Security Council after the attack on Hamas’ office in southern Beirut, according to the Lebanese government.” — [Sulaiman Ahmed](#)

2 January 2024: “Really appreciate the United States of America but with all due respect we are not another star on the American flag. The United States is our best friend, but first of all we will do what is best for the State of Israel: the migration of hundreds of thousands from Gaza will allow the residents of the enclave to return home and live in security and protect the IDF soldiers.” — [Ben Gvir](#), Israeli Minister of National Security, Chairman of Otzma Yehudit

2 January 2023: “Mass graves. Grieving mothers. Widespread starvation. Streets flattened. Homeless orphans.

It is beyond shameful that our political leaders have normalised such horrendous suffering.

We will not forget their complicity in the ethnic cleansing of the Palestinian people.” — [Jeremy Corbyn](#)

3 January 2024: “The “voluntary” resettlement of Palestinians from Gaza is slowly becoming a key official policy of the government, with a senior official saying that Israel has held talks with several countries for their potential absorption.

Zman Israel, The Times of Israel’s Hebrew sister site, has learned that Prime Minister Benjamin Netanyahu’s coalition is conducting secret contacts for accepting thousands of immigrants from Gaza with Congo, in addition to other nations.

“Congo will be willing to take in migrants, and we’re in talks with others,” a senior source in the security cabinet said.

Last Monday, Netanyahu told a Likud faction meeting that he is working to facilitate the voluntary migration of Gazans to other countries.

“Our problem is [finding] countries that are willing to absorb Gazans, and we are working on it,” he said.

The prime minister was responding to Likud MK Danny Danon, who claimed that “the world is already discussing the possibilities of voluntary immigration,” though the idea has been roundly rejected by the international community.

The far-right Religious Zionism and Otzma Yehudit parties, headed by Finance Minister Bezalel Smotrich and National Security Minister Itamar Ben Gvir, respectively, have backed the plans for migration.

Ministers and lawmakers from Netanyahu’s Likud have also been advocating the policy.

The far-right Religious Zionism and Otzma Yehudit parties, headed by Finance Minister Bezalel Smotrich and National Security Minister Itamar Ben Gvir, respectively, have backed the plans for migration.

On Tuesday, Intelligence Minister Gila Gamliel told Zman that “voluntary

migration is the best and most realistic program for the day after the fighting ends.”

On Tuesday, during a conference held in the Knesset to examine possibilities for postwar Gaza, Gamliel said: “At the end of the war, Hamas rule will collapse. There are no municipal authorities; the civilian population will be entirely dependent on humanitarian aid. There will be no work, and 60% of Gaza’s agricultural land will become security buffer zones.”

In internal discussions, Gamliel presented a map of the Gaza Strip after the fighting that shows remaining residents boxed in. Israel would cut ties with Gaza and expand its security buffer zones; control the Philadelphi Corridor, which runs along the 14-kilometer (8.7-mile) Gaza-Egypt border (a plan attacked by an Egyptian lawmaker on Saturday after it was announced by Netanyahu); and establish a permanent naval blockade

Gamliel said that Gaza must not be handed over to the Palestinian Authority, and Gazans must not be left in the Strip to be educated to hate, as that would mean that further attacks on Israel are only a matter of time. While rejecting the PA’s return, the government has offered few details on what political entity it wants to rule Gaza.

“The Gaza problem is not just our problem,” Gamliel said. “The world should support humanitarian emigration, because that’s the only solution I know.”

Likud’s Danon is another of the leading supporters of the plan to encourage Gazans to leave the Strip.

On Tuesday, he presented his five-step plan at a conference in the Knesset (demobilization, establishing a security buffer zone, Israeli presence at the Rafah border crossing between Gaza and Egypt, voluntary emigration, and eradicating the terrorist atmosphere).

In November, he published an op-ed piece in the *Wall Street Journal* along with Yesh Atid MK Ram Ben Barak in which the two detailed the plan for Palestinian migration for the first time, calling for “countries around the world to accept limited numbers of Gazan families who have expressed a desire to relocate.” Ben Barak later seemed to walk back the piece, claiming he had “not been completely understood.”

The security cabinet was supposed to meet Tuesday evening to discuss what will happen in Gaza at the end of the war.

Ministers intended to present their plans and in talks between some of them, the idea was also raised to ask Saudi Arabia to take in hundreds of thousands of Palestinians for work. The Gulf kingdom is in the midst of a tremendous construction boom and employs close to half a million workers, who currently come mainly from India, Bangladesh and other countries.” —[The Times of Israel](#)

3 January 2024, John Kirby regarding South Africa’s lawsuit against Israel in the International Court of Justice, for the genocide in Gaza: “This estimation is meritless, counterproductive, and completely without any basis in fact whatsoever.” —video at [Megatron](#)

4 January 2024: “Finance Minister Bezalel Smotrich and National Security Minister Itamar Ben Gvir have recently called for Gazans to be resettled outside of the

Strip, drawing widespread international condemnation.

Zman Israel reported that Prime Minister Benjamin Netanyahu's coalition is conducting secret contacts for accepting thousands of immigrants from Gaza with Congo, in addition to other nations.

"Congo will be willing to take in migrants, and we're in talks with others," a senior source in the security cabinet said.

Last Monday, Netanyahu told a Likud faction meeting that he was working to facilitate the voluntary migration of Gazans to other countries.

"Our problem is [finding] countries that are willing to absorb Gazans, and we are working on it," he said.

Also Wednesday, France and Germany added their voices to the growing international condemnation of Smotrich and Ben Gvir for their "voluntary emigration" idea.

The United States issued its own condemnation Tuesday. In a relatively rare, unprompted statement, US State Department spokesman Matthew Miller called their comments "inflammatory and irresponsible." — [The Times of Israel](#)

4 January 2024: "Our main goal in the war is to eliminate the threat and not to neutralise it. And we know how to eliminate terrorists. It is more difficult for us with an idea. UNRWA is the source of the idea. The idea is that more and more terrorists are born in all kinds of methods. And it will be impossible to win the war if we do not destroy UNRWA. And this destruction must begin immediately. It is not relevant to talk about the day after. The day is now we must act to deal with these threats completely. Or that we will miss the opportunity window, as we have already done here several times. And in this context, there are two ways we can move forward today. One is the relationship of the State of Israel to UNRWA and the countries that contribute to it. And the second is the relationship to the Palestinian population that UNRWA serves. Sometimes in a legitimate way. In order to deal with the UNRWA itself, let's remember that it operates here, in the territories that Israel conquered in 1967, at the request of Israel to do so. This is what brought it here. Israel can now ask it to stop. And at the same time, dig into the refugee status that it distributes very generously. Because for a refugee, there are international obligations. UNRWA's duties cannot be ignored. They must be abandoned. Or they must go to hell. Whoever deserves it should go and check if the UNHCR can help." —Former Israeli foreign ministry official Noga Arbell as quoted in video at [HK](#)

5 January 2024: "Did you guys know that hundreds of Hamas soldiers died during Oct 7?"

You know there was Apache Helicopters raining hellfire indiscriminately above during Oct 7? (which killed many Israelis btw)

Despite this chaos, mass death, and how dangerous this was for Hamas...Zionists would have you believe that they paused combat in order to commit mass rape with Apache helicopters and the IDF shooting at them

Who believes this stupid shit!?

During the Oct 7 military operation speed was essential for Hamas. Speed is especially critical when you plan on taking hostages

Now despite time being so crucial for the success of this operation Zionists would have you believe that Hamas planned specific “rape breaks” between the fighting” —[Revolutionary Blackout Network](#)

5 January 2024: “Israel has already lost the war. Winning or losing a war isn’t measured by the number of civilians killed. That will be dealt with in The Hague. Palestinians can argue to have a say in what post war Israel looks like.” —[Ghanem Nuseibeh](#)

5 January 2024: “it’s not up to Israel to determine the future of Gaza, which is Palestinian land.

Colonna rejected the suggestion from Israeli ministers that the resettlement of Palestinians outside of Gaza is a possibility.

Those calls are “irresponsible” and “brings us away from a solution,” said Colonna as she noted the suggestions are also against the long-term interests of Israel.

“We need to return to the principle of international law and respect it,” said Colonna.

She noted France’s support for a two-state solution which is “the only viable option,” and underlined that “Gaza and the West Bank must together be part of the future Palestinian state.”

She said civilians are not responsible for the crimes and must be protected, reiterating the obligation to follow international law and protect the civilian population.” —French Foreign Minister Catherine Colonna quoted by CNN and [Anadolu Ajansi](#)

5 January 2024: “It’s not a “war.”

It’s genocide, ethnic cleansing, indiscriminate bombing of civilians (half children), theft, apartheid and occupation.

It’s 30,000+ dead in just a few short months, and only God knows how many maimed for life.

Israel has ZERO respect for human life.” —[Jory Micah](#)

5 January 2024: “BREAKING: Israel just murdered another Palestinian journalist, Akram El Shafei.

Israel has now deliberately targeted and killed 106 journalists in Gaza in 90 days. 106 journalists.” —[Sarah](#)

5 January 2024: “Human rights are universal. Your support for them is either universal or it doesn’t exist. If you only care about your own, then it is not human rights but privilege you care about.

So either you believe in equality, liberty, security and dignity for Palestinians, or for nobody.” —[Tiberius](#)

5 January 2024: “Omg I’m so exhausted of Israel’s shameless rape accusations towards Hamas with zero evidence.

When will they stop insulting our intelligence and weaponizing rape allegations?!” —[Jory Micah](#)

7 January 2024: “Earlier, the IDF struck a vehicle in Rafah in the southern Gaza Strip - the vehicle belonged to terrorist journalist Hamza al-Dahdoh, the eldest son of one of the senior terrorist reporters at Al Jazeera Al-Dahdoh.” —[Mossad Commentary](#)

QUESTION: what the heck do the Israelis mean by “terrorist journalist”?

8 January 2024: “Senior US Democrat [Chris Van Hollen (D)] on Senate Foreign Relations Committee says there should be 'consequences' for Israel's 'political decision' to restrict aid into Gaza” —[Middle East Eye](#)

Van Hollen three days after a visit to the Egyptian side of the Rafah border crossing with Gaza:

“I do think there...have to be consequences.”

“Secretary Blinken and President Biden had been right to insist on two things: a reduction in the unacceptable levels of civilian casualties, and much more cooperation when it comes to providing humanitarian assistance. We’ve not seen that.”

“The other big issue is within Gaza, the so-called deconfliction process, which is just a fancy name for those who are providing humanitarian assistance to have the confidence that they can deliver it without being killed.”

8 January 2024: “Some of the oldest churches in the entire world were in Gaza — and they now lie in rubble, people sheltering inside them, murdered — by Israel, and by Biden’s unlimited deliverance of bombs. If a church is not a place to cry for righteousness, then what is it?” —[Dr. Sumun Pendakur](#)

9 January 2024: “There are historical examples that Biden could end this w/ one phone call. In 1982-Israel was bombing Lebanon & Reagan was very concerned-& viewed it as being detrimental to US interests. In one call to Menachem Begin Israel stopped bombing 20 minutes after the call.” —[Rivoluzione! *Free Palestine](#)

8 January 2024“ “A bullet found its way into the van and killed a 3 or 4-year-old young lady.”

He is describing Israel killing a Palestinian child.” —[Lowkey](#); video included
Text of video from Sky News of event at a border checkpoint in West Palestine:
it looks like accidentally that a straw bullet found its way into the van and that killed a three or four yer old young lady.

8 January 2024: “Every day, another unspeakable atrocity is committed in Gaza. Millions of people around the world support South Africa’s efforts to hold Israel to account. Why can’t our government?

The statement we’ve just heard really does not measure up to the needs of the occasion. 22,000 people have already been killed. 1.9 million displaced. Thousnads

dying in the rubble. Thousands of children dying because of lack of medical care and food. People dying of starvation and thirst and hunger in the Gaza strip at the present time. Cannot the government understand the anger around the world, when they watch this in real-time happening? And why so many people are very pleased that the government of South Africa has taken an initiative in going to the International Court in order to hold Israel to account for the deaths of so many wholly innocent people in Gaza. Can't the government understand that, and at least support the South African process?" —[Jeremy Corbyn](#); includes video

8 January 2024: "BREAKING:

US Secretary of State:

" Hamas could have ended this on October 8 by not hiding behind civilians, by putting down its weapons, by surrendering, by releasing the hostages.

None of the suffering would have happened if Hamas hadn't done what it did on October 7 and if it made different decisions thereafter."

Comment: He practically admits that there is genocide and massacre in Gaza, perpetrated by Israel. Justifying them, that they happened because of Hamas."

—[Megatron](#)

9 January 2024: "If when faced with "Israel must stop this genocide," you respond with "If Hamas released the hostages, it would stop," please note:Ê

A) You've just admitted it's genocide.Ê

B) Israel has over 10,000 Palestinian hostages in Israeli prisons (many of them children) — Why aren't you calling for them to be released?

C) There's no evidence Israel would stop the atrocities no matter how Hamas behaves." —[John Cusack](#)

10 January 2024: "*The New York Times*, *LA Times*, and *Washington Post* play an influential role in shaping U.S. views of the Israeli-Palestinian conflict. The Intercept's analysis of major newspaper coverage of the Gaza war showed a consistent bias against Palestinians." —[The Intercept](#)



10 January 2024: “Antisemitism is absolutely real.

Unfortunately Israel is greatly increasing it globally by trying to equate the state of Israel with Judaism and thereby causing people to think all Jews support the genocide Israel is currently perpetrating.

Millions of us do not support it.” —[Lee Camp \[Redacted\]](#)

10 January 2024: “BREAKING| Less than 24 hours before the ICJ hearings and for the first time, Israel’s Netanyahu speaks in English claiming that he doesn’t seek to expel Palestinians from Gaza.


“Israel has no intention of permanently occupying Gaza or displacing its civilian population. Israel is fighting Hamas terrorists, not the Palestinian population, and we are doing so in full compliance with international law”, he claimed.” —[Quds News Network](#)

11 January 2024: “After South Africa’s legal team presented a robust case with ample evidence against Israel for committing genocide in Gaza at the International Court of Justice, the Israeli Minister of Foreign Affairs accused the team of being “affiliated with Hamas”. ” —[Cosmic Cowboy](#)


11 January 2024: “When I worked for the Bush-era CIA—down the street from the @UN HQs—I learned we were relentlessly infiltrating & undermining UN and @IAEAorg (nearby in Vienna) bodies to thwart perceived anti-war “lawfare.” Hard to imagine @CIJ_ICJ won’t face similar efforts to prevent justice.” —[Edward Snowden](#)

11 January 2024: “BREAKING: South African lawyers have written to Biden warning that they intend to begin proceedings against his government for being complicit in ongoing international crimes carried out by Israel against the people of Palestine.” — [Kahlissee](#)

4 Clevedon Road
2nd Floor, Mount Croix
PORT ELIZABETH
6001
SOUTH AFRICA



P O Box 12339, Centrahil, 6006
Tel: (041) 582-2205/582-2737
Fax: (041) 582-3131
Cell: 083 675 9636
E-Mail: wvrat@mwweb.co.za



2 January 2024

The President of the United States of America: The Honourable Joseph R. Biden, Jr;
The Vice President of the United States of America: The Honourable Kamala Harris;
The United States Secretary of State: The Honourable Antony J Blinken;
The President of the United States Senate: The Honourable Kamala Harris; and
The Speaker: United States House of Representatives: The Honourable James Michael Johnson

Sent via Email to:
president@whitehouse.gov
vice.president@whitehouse.gov
secretary@state.gov

Dear Honourable President, Honourable Vice President, and Honourable Secretary of State,

NOTICE OF INTENTION TO HOLD THE GOVERNMENT OF THE UNITED STATES OF AMERICA LIABLE AND COMPLICIT FOR THE ONGOING INTERNATIONAL CRIMES PERPETRATED IN ISRAEL / PALESTINE AGAINST THE PALESTINIAN PEOPLE

1. We, together with a group of lawyers from South Africa, act on behalf of all the Palestinian people who are directly affected by the ongoing international crimes and displacement perpetrated by the Israeli Government and its armed forces since, but not limited to, 1948, for reasons more fully expressed herein below.

1

2. We hereby place the Government of the United States of America ("the U.S. Government") on notice that we intend to bring legal proceedings against the U.S. Government based on overwhelming evidence that the U.S. Government has, and is, aiding, abetting and supporting, encouraging or providing material assistance and means to Israel and the Israeli Defense Forces ("Israel"). This conduct by the U.S. Government has enabled and continues to enable Israel to engage in international crimes against the Palestinian people. These crimes result in, amongst others, the displacement of the Palestinian people from their homes and property, destruction of Palestinian property, theft of Palestinian land and which facilitate and assist Israel in committing the ongoing and current war crimes, crimes against humanity, genocide, and intentional killing of innocent civilians, including men, women, children and babies as well as the elderly and disabled.
3. Without going into the historical background of the U.S Governments' blind support for Israel, which is in excess of the past 75 years, the U.S. Government has recently used purported emergency authority provisions to provide 14 000 tank shells, amongst others, to Israel without Congressional review. In particular, the U.S. Government has indicated that it supposedly used the Arms Export Control Act (presumably P.L. 90-629 as amended through P.L. 117-263, Enacted December 23, 2022, as amended through P.L. 117-263) emergency declaration for the tank rounds worth approximately US\$106.5 million for delivery to Israel early in December 2023. The U.S. Government did this full knowing that thousands of innocent Palestinians, mostly women and children, have been killed, and are still being killed, by the Israeli government under the hand of its armed forces. The tank shells so supplied by the U.S. Government to Israel is part of a bigger sale for which Congressional approval will be sought for the larger arms package worth more than US\$500 million and comprises of, amongst others, 45 000 shells for Israel's Merkava tanks, which tanks are regularly deployed in Israel's offensive in Gaza, which offensive has killed thousands of civilians¹ and which continues to kill civilians on a daily basis.

¹ <https://www.cnbc.com/2023/12/09/us-government-uses-emergency-authority-to-provide-tank-shells-to-israel.html>

4. U.S. Policy and international law require that (American) weapons transferred to foreign governments, including Israel, are used in a manner consistent with protecting civilian lives.
5. The world's top international human rights organizations, including US and UK based Amnesty International and Human Rights Watch, have conducted, and presented in-depth legal analysis over the past several years that has found that the Israeli government is committing the crimes of apartheid and persecution as per the legal definitions in international law. See the written motivation for legal proceedings instituted by South Africa in the International Court of Justice (ICJ) which spans some 84 pages, of which you would be aware of, which must be read as duly incorporated herein.

BACKGROUND

6. The Balfour Declaration, which resulted in a significant upheaval in the lives of Palestinians, was issued on 2 November 1917 by the United Kingdom's then Foreign Secretary, Arthur Balfour, supported by the British Government, as well as the U.S. Government, having consulted and having obtained the support of the then U.S. president, Woodrow Wilson.
7. In brief, as you know, the Balfour Declaration was literally the British Government, together with the U.S Government, announcing its support for the establishment of a "national home for the Jewish people" in Palestine, a country, like every other, having its own indigenous people at the time, to the factual detriment of the Palestinian people as seen today.
8. The Balfour Declaration came in the form of a letter from Britain's then foreign secretary, Arthur Balfour, addressed to Lionel Walter Rothschild, a figurehead of the British Jewish community. It was made during World War I (1914 – 1918) and was included in the terms of the British Mandate for Palestine after the dissolution of the Ottoman Empire.

9. For want of brevity, the Balfour Declaration states as follows:

Foreign Office November 2nd, 1917

Dear Lord Rothschild:

I have much pleasure in conveying to you, on behalf of His Majesty's Government, the following declaration of sympathy with Jewish Zionist aspirations which has been submitted to, and approved by, the Cabinet:

His Majesty's Government view with favor the establishment in Palestine of a national home for the Jewish people, and will use their best endeavors to facilitate the achievement of this object, it being clearly understood that nothing shall be done which may prejudice the civil and religious rights of existing non- Jewish communities in Palestine, or the rights and political status enjoyed by Jews in any other country.

I should be grateful if you would bring this declaration to the knowledge of the Zionist Federation.

Yours,

Arthur James Balfour

(Own emphasis added)

10. Importantly, the Balfour Declaration became the catalyst and vehicle for the Zionist aim of establishing a Jewish state in Palestine into a reality with the British and U.S. Government's public pledge to establish "a national home for Jewish people" there.

11. With the benefit of time, history has shown that the British and U.S. Governments have certainly used "*their best endeavours to facilitate the achievement of this object*", being the current Jewish state of Israel, but certainly did little to nothing to ensure that "*nothing shall be done which may prejudice the civil and religious rights of existing non- Jewish communities in Palestine*", given the historical, ongoing and current international war crimes committed by Israel and its armed forces against the innocent Palestinian people.

4

11 January 2024: "The Israeli Minister of Foreign Affairs accused the South African legal team in the International Court of Justice of being CONTROLLED BY HAMAS!" — [Jackson Hinkle](#)

11 January 2024: "crying "ANTISEMITISM!" to criticism of Israel is like crying

“HOMOPHOBIC!” to criticism of Jeffrey Dahmer.” — [Pjhil Good](#)

11 January 2024: “PRESS RELEASE: Israel’s military is killing #Palestinians at an average rate of 250 people a day, which massively exceeds the daily death toll of any other major conflict of recent years.

“It is unimaginable that the international community is watching the deadliest rate of conflict of the 21st century unfold, while continuously blocking calls for ceasefire.” Sally Abi Khalil, Oxfam’s Middle East Director” — [Oxfam International Media Team](#)

12 January 2024: “#BREAKING: Germany intends to intervene in #ICJ hearing in support of Israel.

Germany:

“In view of German history and the crimes against humanity of the Holocaust, the Government is particularly committed to the Convention against Genocide.

This convention is a central instrument of international law to implement the principle of “never again”. We resolutely oppose its political instrumentalization.

We know that different countries rate Israel’s operation in the Gaza Strip differently. However, Germany firmly and expressly rejects the accusation of genocide now made before the International Court of Justice against Israel. This accusation lacks any basis [and] ... Government intends to intervene as a third party.” ” — [Arsen Ostrovsky](#)

12 January 2024: “BREAKING| Canada’s Prime Minister Justin Trudeau denies that Israel has been committing genocide against the Palestinian people in Gaza saying that his country rejects the premise of South Africa’s case at the ICJ, which was described as fact-based and compelling.” — [Quds News Network](#); includes video

12 January 2024: “Israel has killed more journalists in Gaza than all journalists killed in WWII.” — [Dr. Anastasia Maria Loupis](#)

12 January 2024: ““I believe weÕ’e going to take Mecca, Medina and Mount Sinai, and purify those places”

Israeli writer and politician Avi Lipkin said during a TV interview that he envisages Israel’s borders will extend “from Lebanon to Saudi Arabia” and “from the Mediterranean to the Euphrates” ” — [Middle East Eye](#); includes video

“Eventually our borders will extend from Lebanon, the great desert, which is Saudi Arabia, and then from the Mediterranean to the Euphrates. And who’s on the other side of the Euphrates? The Kurds, and the Kurds are our friends. So we have the Mediterranean behind us, the Jurds in front of us, Lebanon, which really needs the umbrella of protection of Israel, and then we’re going to take, I believe we’re going to take Mecca, Medina, and Mount Sinai, and purify those places.”



13 January 2024: “The IDF has killed journalist Muhammad Al-Thalathiini and his entire family in a missile strike in southern Gaza.” —[Cosmic Cowboy](#)

13 January 2024: “A few days ago I met the Secretary of State Blinken. I thanked him. The American assistance and I said to him We waged this war after these monsters butchered us. We do not stop. We do not stop until we eliminate the Hamas and bring back the hostages. And I also said that it’s not just our war, it’s your war as well. This is the war of the sons of light against the sons of darkness. This is against the axis of evil by Iran and the Houthis and the Hezbollah and the Hamas. And I added that I don’t forget for one moment that in addition to the war in Gaza, in addition to bringing back hostages, and the inhabitants to their homes both in the north and the south, we have an existential mission to prevent Iran from obtaining nuclear weapons. That’s my mission, that’s our mission and I said to Secretary Blinken this must be your supreme mission as well.” —Benjamin Netanyahu (prime minister of Israel) quoted in video by [Disclose.tv](#); includes video

13 January 2024: “Netanyahu makes it clear America works for Israel and will fight his war even if it's unpopular

He again he calls Palestine children the children of darkness

This makes genocide justifiable” —[Jake Shields](#)

13 January 2024: “Breaking: The Israeli military has killed journalist Muhammad Al-Thalathiini and his entire family in a missile strike in southern #Gaza !” —[Nour Naim](#)

13 January 2024: “No matter your politics, it should appall you that the media outlets which claim to care the most about “misinformation” suppressed coverage of South Africa’s case against the Gaza genocide, but fully covered Israel’s defense the

next day—intentionally denying you the full story.” —[Edward Snowden](#)

13 January 2024: “The good news is that this is a one-time thing, and they would never do this when covering elections, pandemics, the scrupulously legal and totally uninteresting mass surveillance that’s logging your viewing of this tweet right this second, or our ten thousand endless proxy wars.” —[Edward Snowden](#)

13 January 2024: “The White House has been EVACUATED of non-essential staff due to a LARGE pro-Palestinian pro-Peace protest across the street.

Snipers have been deployed to the roof of the White House.” —[General Strike \(Terrence Daniels\)](#); includes video

13 January 2024: “I’ve seen 1000’s of videos of Palestine Kids being killed

I’ve seen zero videos of Israel kids being killed

The IDF assures us they have these videos but won’t show us and says trust them

I prefer to trust my own eyes over the Israeli propaganda machine

How about you?” —[Jake Shields](#)

In response to “countless videos of them [Hamas] gang-r**ing women and then blowing their head off while they chop off one of their breasts!” —video of Adam Sosnick at [Censored Men](#)

14 January 2024: “ABU OBEIDA LIVE SPEECH

“We targeted and removed 1,000 Israeli military vehicles within 100 days in Gaza.”

“Our mujahideen maintained the cohesion of their ranks and increased their conviction in defending their land against a barbaric enemy and wrote epics that are unparalleled in this time.” ” —[The Saviour](#)

14 January 2024: “Starvation is reality in Gaza. Thousands in Gaza city rushed out upon hearing of a food truck’s arrival and were fired upon by the IDF.” —[Cosmic Cowboy](#); includes video

15 January 2024: “ “Nothing can justify the collective punishment of the Palestinian people.

I’m deeply troubled by the clear violation of international humanitarian law that we are witnessing” ” —UN Secretary General quoted by [Palestine and MENA Info Center](#)

15 January 2024: “Gazans applying under IRCC’s [Immigration, Refugees and Citizenship Canada] new visa program are being asked to list all previous phone numbers and e-mail addresses, provide links to all social media accounts, give a history of any scars or injuries they have sustained, and describe any disciplinary issues that they had at any job going back to age 16.

It remains to be seen if this new form, the IMM 0706, will be unique to Gaza.” —[Steven Meurens](#)

4. Provide all your past telephone numbers.

☐ Not Applicable

a ☐ CANADA/US ☐ Other

Type Country Code No. Ext.

5. Provide all your past email addresses.

☐ Not Applicable

a E-mail Address

6. Provide all your social media accounts, including Facebook, Instagram, Snapchat, TikTok, WhatsApp and all other messaging applications, include usernames and account links (URL). Do not provide your passwords.

☐ Not Applicable

a Platform account/profile

7. Provide a full and detailed employment history since the age of 16 years, including exact dates, description and details on your roles and responsibilities, name(s) of supervisor(s), reason for leaving the job, and any disciplinary issues. Excluding information already provided in your application (i.e. additional to the past 10 years in your application).

☐ Not Applicable

From (YYYY-MM)	TO (YYYY-MM)	Roles and Responsibilities	Name of Supervisor(s)	Reason for leaving	Disciplinary issue	Name of company, employer	City or town and country or territory
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

8. Provide a description of any scars or injuries which have required medical attention and how you sustained these scars or injuries.

☐ Not Applicable

a Provide details.

17 January 2024 (a comment about how the Zionists really feel about Palestinians):
 “That is not going to happen. Extermination is the only viable answer when there is an infestation of sub-human vermin wanting/trying to commit genocide on Israel. The world wants them exterminated - wants them to go extinct ASAP.” —[Jerry Osage](#)

18 January 2024: “For thirty years I am very consistent and I am saying something very simple. This conflict is not on the lack of a state for the Palestinian, but on the existence of a state, the Jewish state. Every area that we evacuate we receive terrible terror against us. It has happened in south Lebanon, in Gaza and also today in Samaria which we visited. **And therefore I clarify that in every arrangement, any other arrangement in the future the state of Israel will have to control on the entire area from the river to the sea.** This is what happens when you have sovereignty. This truth I say to our American friends. And I also stopped the attempt to impose on us a reality that will jeopardize us. A prime minister in Israel has to be able to say even to the best of friends, to say no when you need and to say yes when you can.” — Benjamin Netanyahu quoted in video tweeted by [In Context](#); includes video

18 January 2024: “WHORE OF WAR

New York Times correspondent Patrick Kingsley reports that Hamas has built up to 450 miles of tunnels in Gaza. He knows this because Israeli officials told him. FACT: The total tunnel length of New York City’s famous sprawling, ramified subway system is 443 miles. FACT: If the Israeli figure is true, then, every 1,250 feet of Gaza along its width, there is another 25-mile-long tunnel stretching across its length. Kingsley didn’t consult a single engineer on the plausibility of this Israeli claim. He knows that Hamas tunnels are Israel’s prime alibi to escape the charge of genocide at the ICJ: if Israel is carpet bombing Gaza, that’s because Hamas tunnels are literally everywhere. If Kingsley is not a whore of war, who is?” —[Norman Finkelstein](#)

18 January 2024: “#JSIL holy warrior in Gaza says (in American English) that Israel is waging war to anoint a king messiah, and build a third temple over the ruins of the al-Aqsa compound).

Israel is transitioning from apartheid ethno-state into genocidal theocracy. Zionism is reaching its logical conclusion.” —[Dan Cohen](#); includes video

TRANSCRIPT OF VIDEO: They call this operation the Swords of Iron. But what are we really fighting for? We’re fighting for the right of the Jewish people to exist, be Jewish, practice their religion, and be free. And one day our true leader will come and we will be united as a whole Jewish nation so we can rebuild the bet hamikdash (temple). But until then what makes us unique is we’re that one nation who believes in one God which ultimately makes the reason why. We are Am yisrael Chai Shabbat Shlom to the Jewish people.

18 January 2024: “President Herzog in completely detached from reality mode:” —[Palestine and MENA Info Center](#); includes video

Transcript of Herzog at the World Economic Forum, Davos, Switzerland:

But the truth is that we are fighting a war for the entire universe, for the free world. I always say if Israel was not there, Europe will be next because these barbaric jihadists want to get all of us out of the region and want to get all of Europe out of its place as well. And the United States is next to. So, this war is something of an essential element in the history of humankind.

19 January 2024: “Israeli minister, Ben-Gvir:

“We must go to war with Hezbollah ”

“If we do not quickly start a war against Hezbollah, it will be difficult for the residents of the north to return. ” ” —[Palestine and MENA Info Center](#)

20 January 2024: “We do not see any war crimes against women and children in Gaza, so there is no need for a ceasefire.

John Kirby says the White House is gathering additional information regarding Mexico and Chile’s request for an investigation into potential war crimes by Israel.”

—[The Savior](#)

20 January 2024: “Israeli soldiers have been filming themselves mocking Palestinians and posting it on social media as they continue their offensive in Gaza”

—[Al Jazeera English](#); includes video

21 January 2024: “ ‘The threat is no longer from Hamas, but from (Israel’s) criminal cabinet.’

Thousands of outraged Israelis, including relatives of soldiers and captives, are calling for new elections, saying they’ve lost faith in their government.” —[Al Jazeera English](#); includes video

21 January 2024: “Israeli Prime Minister Benjamin Netanyahu on Sunday rejected

conditions presented by Hamas to end the war and release hostages that would include Israel's complete withdrawal and leaving Hamas in power in Gaza.

"In exchange for the release of our hostages, Hamas demands the end of the war, the withdrawal of our forces from Gaza, the release of all the murderers and rapists," Netanyahu said in a statement. "And leaving Hamas intact."

"I reject outright the terms of surrender of the monsters of Hamas," Netanyahu said.

In the statement on Sunday, Netanyahu repeated that he would insist upon "full Israeli security control over all the territory west of Jordan."

Netanyahu said he had firmly stood up to "international and internal pressures" to change this position and would continue to do so.

"My insistence is what prevented for years the establishment of a Palestinian state that would have posed an existential danger to Israel," he said." —[Reuters](#)

21 January 2024: "Netanyahu:

"We are giving Hezbollah a final chance to come to the negotiating table and let the residents in the north live in peace."

"Otherwise we will inflict such a defeat they have NEVER witnessed and will not be able to recover!" " —[Adam](#)

22 January 2024: "Elon Musk says the indoctrination of Gazan children "must stop" for long term peace to be achieved and continues to wear dog tags around his neck in support of the hostages still held by Hamas.

His remarks came during a conversation with conservative American commentator Ben Shapiro shortly after the pair toured Auschwitz death camp together.

The X owner and CEO of Tesla said: "The indoctrination of hate into kids in Gaza has to stop. When I was in Israel, that was my top recommendation. I understand the need to invade Gaza, and unfortunately some innocent people will die, there's no way around it.

"The most important thing is to ensure that afterwards, the indoctrination where kids are taught from as soon as they can understand language, that their goal is to kill Israelis; if you're told that from when you're a toddler, you're going to believe it, and that needs to stop."

Musk and Shapiro appeared during a two-day event in Krakow, Poland, hosted by the European Jewish Association, the first major Jewish conference to Auschwitz since October 7.

Musk further admitted to being "frankly naïve" about the level of antisemitism today. He said: "In the circles I move, I see almost none. Two thirds of my friends are Jewish... I'm Jewish by association." He added that the "pro-Hamas rallies" that took place in cities across the West, "blew" his mind.

Musk recently toured the territories surrounding the Gaza Strip that were invaded by Hamas. He says he brought with him to Israel "three strong recommendations" to achieve peace.

"Obviously, one has to get rid of Hamas fighters where reform is impossible, [where] their only goal is to kill Israelis, they ought to be killed or imprisoned,

otherwise they will simply kill more Israelis. Then the second thing is you've got to change the indoctrination in the schools so that kids are not taught to hate from the moment they are two years old. And the third thing, which is a very hard thing to do in this situation, is conspicuous acts of kindness to the people in Gaza... It's just that much harder to hate someone if they do nice things for you, even if they try to bite your hand when you're doing it, keep doing it."

Elon Musk has continued to wear dog tags around his neck in support of the hostages still held by Hamas, who he hopes are still alive, and says the "most shocking" thing to see in footage from October 7 was Hamas's "delight in killing kids", which requires "a level of indoctrination that is extremely intense."

Before Shapiro and Musk took the stage, Israeli Minister of Diaspora Affairs and Combating Antisemitism, Amichai Chikli, dedicated his speech to Holocaust historian Alex Danzig from Kibbutz Nir Oz, who is still held captive.

Chikli said: "Not far from here, absolute evil singled out the Jewish people as its ultimate enemy. Some imagined that after the unimaginable atrocity of the Holocaust, it would vanish. But it was a merely respite, and that respite has now ended.

"A new generation has emerged, a generation that does not know Auschwitz, this is what moral collapse looks like."

Former president of the State of Israel, Reuven Rivlin, provided the keynote address. He said the responsibility to fight against antisemitism and racism belongs to "the entire free world."

Rivlin led the first roundtable discussion of the European Jewish Association Leaders Forum to Fight Antisemitism and Racism (ELCA), a body created recently which he hoped would act as a "beacon of hope" to the world." —[The Jewish Chronicle](#)

24 January 2024: "In Rafah, more than a million people live in just 3 kilometres: starvation, disease, dehydration and sickness is everywhere #AirDropAidForGaza" —[Sarah Wilkinson](#); includes video

24 January 2024: "The #UN Humanitarian Coordinator for #Palestine @jamiemcgoldric8 says #Israel recently added insulin pens for children to the list of prohibited items that are not allowed into #Gaza and he does not know why. He adds that other medicines for chronic illnesses are also not allowed. That is not to mention other critical banned supplies he mentioned which are urgently needed for water and sanitation such as pumps, generators, spare parts, pipes, solar panels, and medical equipment.

"Some of it is medical material, such as basic drugs and material for treating not just trauma but chronic illnesses. One example would be most recently, the pens that are used for insulin for children have been recently put on that list. In terms of the reasons and rationale for it, I really can't explain what that is because I don't know. We are currently in discussions with the Israeli authorities, COGAT in particular, to look at ways how we can examine that list which they think is prohibited items and find ways how we can get those released because these are going to be essential

commodities for us to address the emergency which is currently unfolding in a very dramatic fashion,” he says.” —[Rami Ayari](#)

25 January 2024: “US National Security Spokesperson, John Kirby, says the US does not “wanna see Hamas in charge of Gaza anymore.”

Biden administration had stated on several occasions that the US does not interfere in other countrys’ internal affairs.” —[Quds News Network](#); includes video

We don’t want to see Hamas in charge of Gaza anymore. They chose to violate the cease fire that was in place. And we certainly agree with our Israeli counterparts that whatever the future of post-conflict Gaza looks like, it can’t include Hamas leaders.

25 January 2024: “Children have been shot in other cnflicts I have covereed. But never before have I watched as soldiers enticed children like mice into a trap and murdered them for sport.” —Christopher Hedges quoted by [M.J. Salem](#)

26 January 2024: “A French journalist asked an IDF spokesman whether they still believed there was a Hamas command center under al-Shifa Hospital, pointing out that the evidence presented after the IDF seized it didn’t match the original claims made by Israel.

He replied that it was “unacceptable” for “a democracy like yours to ask another democracy a question” and added that such a question was “extremely weird or even nauseating”.

Asking for the truth is weird.

Asking for the truth is nauseating.

Asking for the truth is bias.” —[Palestine and MENA Info Center](#); includes video

26 January 2024: “There was a lot of detail there. Here are the provisional measures the court has made:

1. Israel must take all measures to prevent any acts that could be considered genocidal - killing members of a group, causing bodily harm, inflicting conditions designed to bring about the destruction of a group, preventing births

2. Israel must ensure its military does not commit genocidal acts

3. Israel must prevent and punish any public comments that could be considered incitement to commit genocide in Gaza.

4. Israel must take measures to ensure humanitarian access

5. Israel must prevent the destruction of evidence that could be used in a genocide case

Israel must submit a report to the court withing one month of this order being given

The court also expressed grave concern about the fate of hostages being held by Hamas and called for their immediate release.” —Anna Holligan, reporting from The Hague

28 January 2024: “Now Nancy Pelosi is saying that protesters calling for a ceasefire in Gaza are connected to Russia and doing Putin’s work. Unreal.” —[Joshua](#)

Hill

28 January 2024: “Nancy Pelosi: Protesters calling for a ceasefire in Gaza “is Mr. Putin’s message... Make no mistake, this is directly connected to what he would like to see...”

“I think some of these protesters are spontaneous and organic and sincere. Some I think are connected to Russia.” —[Cosmic Cowboy](#)

28 January 2024: “Israeli Defense Minister Gallant:

“If we cannot achieve victory in the Gaza war, we cannot live in the Middle East.” —[Aditya Juan Mandagie](#)

28 January 2024: “Personally, it doesn’t bother me if an Arab baby dies. It bothers me more when Jews die. I don’t care if Arabs live or die. I prefer them dead.” — Jewish woman quoted by Al Jazeera, video at [Johann Spischak](#); includes video

30 January 2024: “I am now leaving Khan Younis with mixed emotions, On one hand, we are filled with great joy — no longer in the era of progroms that slaughtered, tortured, and abused us without response. Blessed be the Lord, we have destroyed a vast territory, Killed tens of thousands of the Amalek. On the other hand, we have not yet become a moral army, and that is the true war facing the people of Israel. The rest will fall in place easily once we iunderstand morally that every Arab is a suspicious entity. Perhaps he is good, perhaps he’s a bomb. But he is suspect. To be moral is to execute all the terrorists after investigating them. To be moral is to conquer and flatten all parts of the land of Israel. Any place we leave a hornets’ nest untouched will retaliate. Understanding this saves lives. We must grasp this in our minds before the enemy explains it to us with blood, god forbid, agaainst us sonner or later. Good luck to all of us, to all the people of Israel in this grand and crucial battle.” —Israeli officer Chai Hamo in video at [Younis Tirawi](#); video included

3 February 2024: “Israeli protesters block aid trucks from entering the Gaza strip.” —[Ahmed Samir](#)



9 February 2024: “Israeli PM Netanyahu directs military to prepare to evacuate over 1 million Palestinians from southern Gaza city of Rafah ahead of a ground operation.” —[CNN Breaking News](#)

9 February 2024: “There is no other place for Gazans to go. Clearing Rafah is not war, it is not defense, it is an outright attack on the innocent. This is the moment for the United States to act. We must exhaust the levers we have to prevent a humanitarian disaster in the making.” —[Alexandria Ocasio-Cortez](#)

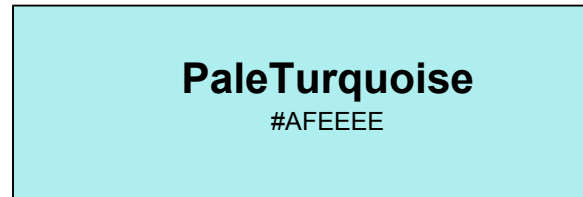
10 February 2024: “Deeply concerned about the prospect of a military offensive in Rafah — over half of Gaza’s population are sheltering in the area.

The priority must be an immediate pause in the fighting to get aid in and hostages out, then progress towards a sustainable, permanent ceasefire.” —[David Cameron](#),

Secretary of State for Foreign, Commonwealth and Development Affairs; and Former Prime Minister of the United Kingdom

PaleTurquoise

keyword: HTML color name



PaleVioletRed

keyword: HTML color name



Panama

nation

United States invades Panama to arrest Manuel Noriega 1989.

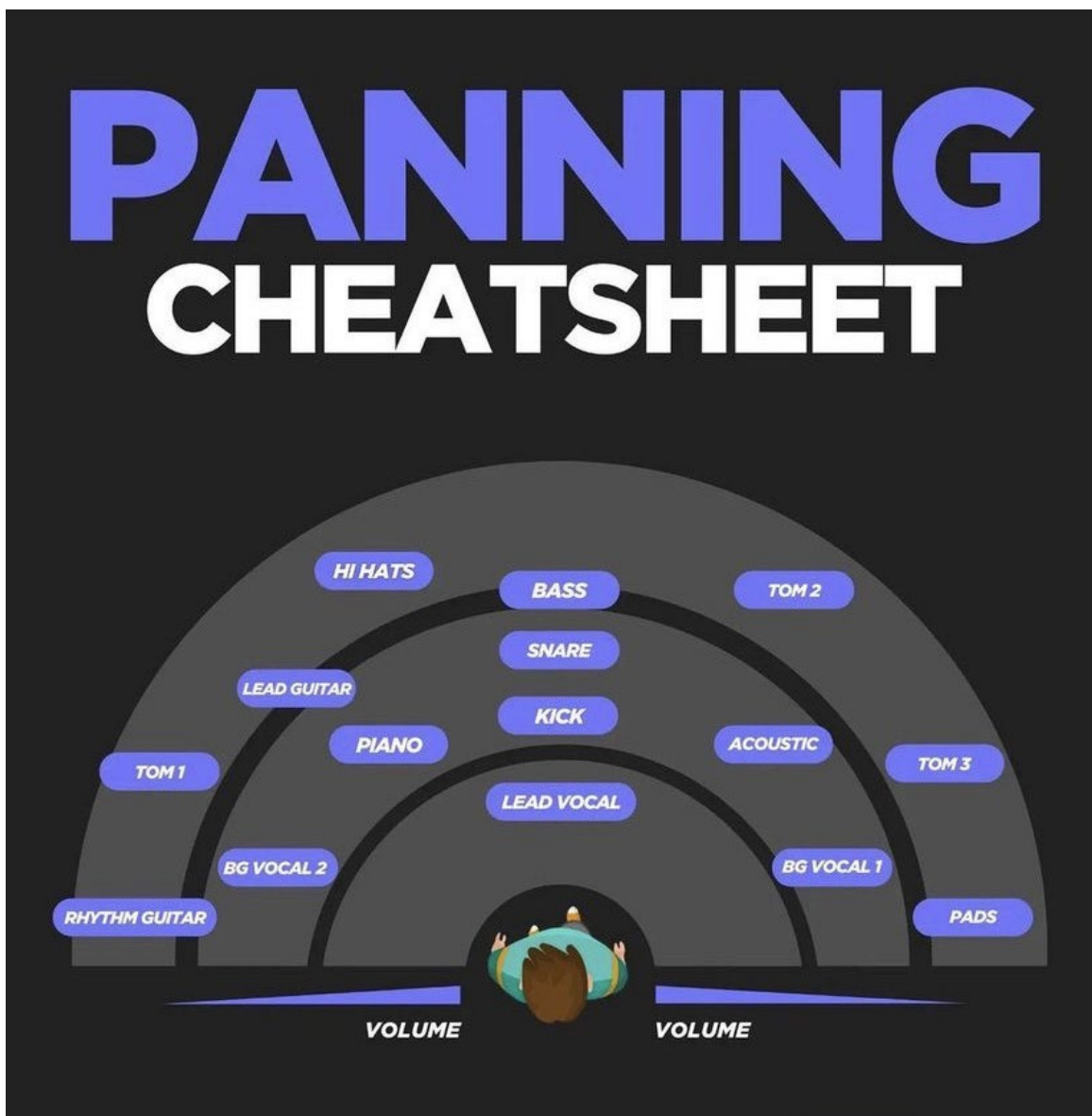
See: Central Pangean Mountians

panning

29 August 2023: “panning cheat sheet” — [Solar Heavy](#)



14 September 2023: “panning cheat sheet” — [Solar Heavy](#)



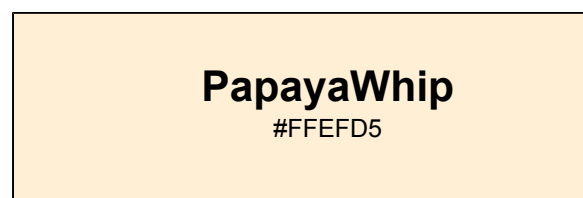
7 October 2023: “mix panning cheat sheet” — [Solar Heavy](#)



15 December 2023: “Pro tip: You should know how the pan knobs work in your DAW. FL’s default panning-law is Circular, and the meters below demonstrate the difference (my preference is Triangular).” —[Eduard](#); the video accompanying the tweet lets you see the difference between circular and triangular panning.

PapayaWhip

keyword: HTML color name



paper

Paper was invented in China around 100 BCE and was made from hemp.

paramedic

21 August 2023: “A class action wage theft lawsuit has been filed against Elite Ambulance, a large private ambulance company in the Chicago area.

Paramedics and EMTs say the company deducted red light and speeding tickets from their pay.

Tickets they got trying to get patients to the hospital.” —[More Perfect Union](#)

parametric EQ

16 January 2024: “Sound engineering glossary

· Parametric EQ

It basically comes down to the word “parametric,” which means “containing parameters”

A parametric EQ is an equalizer with which you can continuously adjust all the EQ parameters:

- Frequency
- Q factor
- Gain

Example ↓” —[Nathaniel W.](#)



paradise

“The paradise of the rich is made out of the hell of the poor.” —Victor Hugo

parent

keyword: JavaScript windows method

Michael Parenti

“In fact, U.S. leaders have been dedicated above all to making the world safe for global corporaate investment and the privater profit system. Pursuant of this goal, they have used fascism to protect capitalism, while claiming to be saving democracy from communism.” —Michael Parenti

“The problem with capitalism is that it best rewards the worst part of us: the ruthless, competitive, conniving, opportunistic, acquisitive drives, giving little reward and often much punishment-or at least much handicap-to honesty, compassion, fair play, many forms of hard work, love of justice, and a concern for those in need.” —

Michael Parenti



“The enormous gap between what US leaders do in the world and what Americans think their leaders are doing is one of the greatest propaganda accomplishments.” — Michael Parenti

“One finds fortunes built on slave labor, indentured labor, prison labor, immigrant labor, female labor, child labor, and scab labor - backed by the lethal force of gun thugs and militia. ‘Old money’ is often little more than dirty money laundered by several generations of possession.” —Michael Parenti

Parker (dog)

20 September 2023: “Parker, a friendly elderly dog in Dexter, MO, got spooked during thunderstorm & ran away from home. Owner asked FB for help finding him. Someone saw FB post, found dog, called cops to take dog home. Cops came, drove dog to remote area and executed him, threw in ditch.” —[IncarcerNation](#)



parseFloat

keyword: JavaScript windows method

parseInt

keyword: JavaScript windows method

Lucy Parsons

“Never be deceived that the rich will permit you to vote away their wealth.” —
Lucy Parsons

password

keyword: COBOL reserved word (z/OS)

Patriot Act

Joe Biden voted for the Patriot Act.

patriotism

“Patriotism is the willingness to kill and be killed for trivial reasons.” —Bertrand Russell

Les Paul

Les Paul invented the solid body guitar, multi-track recording, echo, delay, and reverb.

See: .pcd 🍷 — file extension

See: .pcm — file extension

pctfree

keyword: SQL reserved word (Oracle)

See: .pcx 🍷 — file extension

See: .pdf — file extension

peach

August 2023: Most of Georgia's peach crop was lost to climate change.

PeachPuff

keyword: HTML color name



peace

“Those who love peace must learn to organize as effectively as those who love war.” —Martin Luther King Jr.

“And the Russians are dying. It's the best money we've ever spent,” —Lindsey Graham

27 May 2023: “Remember the US and NATO promised the world a “peace dividend” if the Soviet Union dissolved. It's been over 3 decades. Which country has the US or NATO brought peace to? I'll wait. Just one country please.” —[nuno marques](#)

20 August 2023: “That massive spending on war and weaponry impedes domestic progress and erodes Americans' quality of life has been a staple of left-liberal politics for decades.

It was MLK's key point in his April 4, 1967 speech on Vietnam.

Now, liberals scorn this view as Kremlin propaganda” —[Glenn Greenwald](#)

pedocracy

“PEDOCRACY — Government by the learned, savants, and scholars.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

John Pelletier

14 August 2023: “I don’t know about you, but I find it very interesting that Maui Police Chief John Pelletier also happened to be the Incident Commander during the Las Vegas mass shooting.” —[Hust.A.Thought](#)

Pegasus

Pegasus is a spyware developed by the Israeli cyber-arms company NSO Group that is designed to be covertly and remotely installed on mobile phones running iOS and Android. While NSO Group markets Pegasus as a product for fighting crime and terrorism, governments around the world have routinely used the spyware to surveil journalists, lawyers, political dissidents, and human rights activists.

As of March 2023, Pegasus operators were able to remotely install the spyware on iOS versions through 16.0.3 using a zero-click exploit. While the capabilities of Pegasus may vary over time due to software updates, Pegasus is generally capable of reading text messages, call snooping, collecting passwords, location tracking, accessing the target device's microphone and camera, and harvesting information from apps. The spyware is named after Pegasus, the winged horse of Greek mythology. —[Wikipedia](#)

pen

The average pen can write about 45,000 words before running out of ink.

pencil

On average a pencil can be sharpened 17 times. The average pencil can write about 45,000 words.

pen gun

noun “A firearm enclosed within what appears to be a writing pen (Penal Code Section 17270)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Pentagon

21 September 2023: “BREAKING: Pentagon has decided to exempt Ukraine operations from a potential shutdown if lawmakers can’t agree on a deal by the end of the month - Politico” — [Insider Paper](#)

people

“A people is any plurality of persons considered as a whole. Used in politics and law, the term “a people” refers to the collective or community of an ethnic group or nation. The term “the people” refers to the public or common mass of people of a polity.” — [Wikipedia](#)

Perdue

6 December 2023: “BREAKING: The biggest chicken and tuna companies in the U.S. have been found guilty of price fixing.

Now thousands of people are getting paid with money recovered from the corporations.

The State of Washington is using over \$40 million to send checks to 402,200 households.

Perdue, Tyson, Sanderson Farms, and JBS are colluding to raise chicken prices — up 61% over the last 15 years.” — [More Perfect Union](#)

perfect

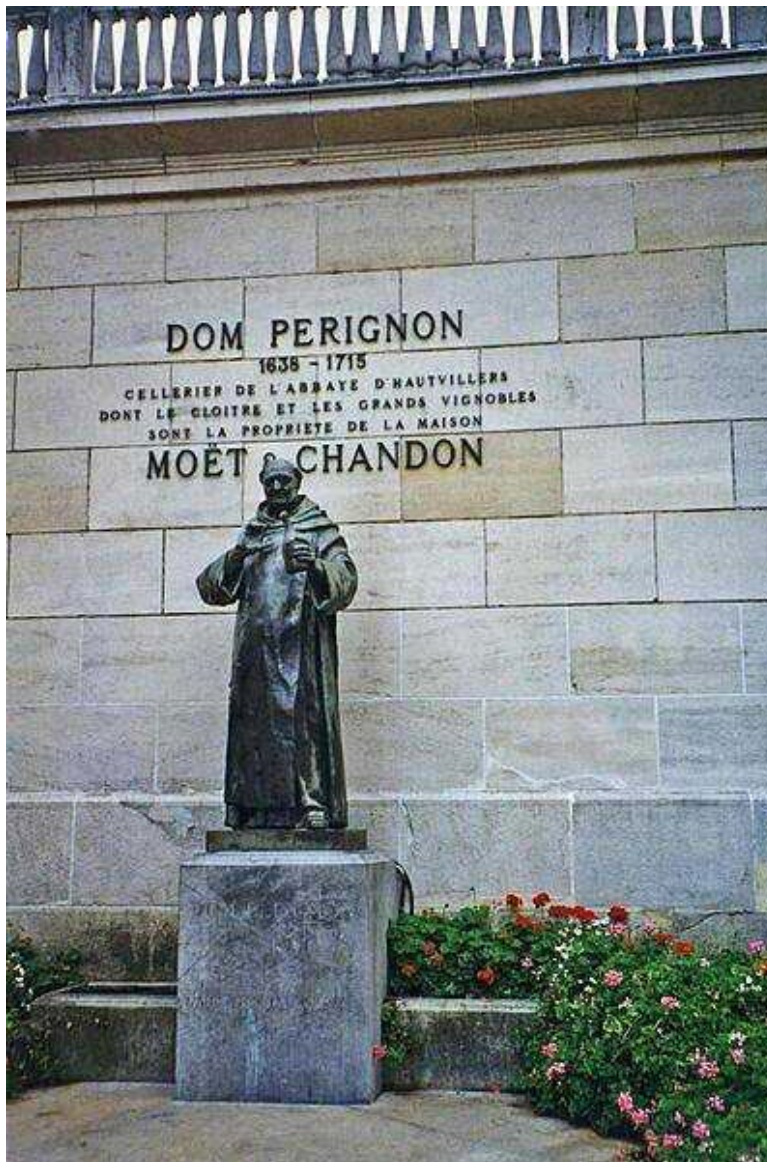
The saying “perfect is the enemy of good” is attributed to Voltaire. He actually wrote “best is the enemy of the good” (il meglio è nemico del bene) in 1770, citing a then old Italian proverb.

perform

keyword: COBOL reserved word (z/OS)

Dom Perignon Statue

30 December 2023: “The French Benedictine monk Dom Pérignon (1638-1715) made many important contributions to the production and quality of champagne wines as a way to offset his monastery’s financial difficulties. He studied how to avoid explosions during the refermentation, advocated harvesting grapes in small crops in cool conditions before sending them to the press, and popularized using naturally occurring processes in winemaking. Wines bearing his name sold for twice as much as others, making it the first time in economic history someone successfully used their own name and personality as a marketing tool. In 1937, Moët & Chandon bought the brand name Dom Pérignon for their prestige cuvée, as well as the remains of the Abbey of Hautvillers in Epernay where the monk lived. This statue stands outside the gate.” —CIA World Factbook (material that expires after 30 days)



perl-byacc

programming language

“

perl-byacc - produces perl output <ftp://ftp.sterling.com/local/perl-byacc1.8.2.tar.Z>

—*The Language List*: information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

yacc

Personal CP/M

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

A refinement of CP/M for Intel 8080/8085 and Zilog Z80. —[Wikipedia: List of operating systems](#)

CP/M

Personal CP/M-86

abbreviation

operating system

Proprietary OS by Digital Research, Inc.

A refinement of CP/M for the Intel 8088/8086 —[Wikipedia: List of operating systems](#)

CP/M

Peru

In December 2022, Peru's democratically elected President Pedro Castillo was impeached by Peru's Congress. The Peruvian military arrested him and sentenced him to 18 months in prison without a trial or due process of law. The impeachment charge was that President Pedro Castillo had supposedly attempted a coup against himself.

Peru's unelected President is now Dina Castillo, who has been coordinating his government policy with US ambassador to Peru Lisa Kenna, a former CIA agent appointed as ambassador by US President Joe Biden.

The day before the coup, US ambassador Lisa Kenna met with Peru's defense minister to coordinate military arrest of President Pedro Castillo and prevent scheduled elections for Peru's Congress and on a new Constitution to replace the one written by US-backed dictator Alberto Fujimori. Following the coup, ambassador Lisa Kenna has met with Peru's Mining Minister and Energy Minister to bring in Western mining companies.

Peru is the world's second largest producer of copper (about 10% of the world supply), as well as a major producer of gold, zinc, silver, lead, and iron, and as a leading producer of natural gas has been exporting natural gas to Europe to make up for the loss of Russian natural gas after the Biden administration blew up the Nord Stream 1 and Nord Stren 2 pipelines. In 2022 China bought 67.5% of Peru's copper.

There are widespread protests throughout Peru. The Institute of Peruvian Studies (IEP), the nation's leading polling firm, found in April 2023 that 6% of the Peruvian population approves of the Congress and 91% disapprove. 15% of Peruvians support unelected President Dina Boluarte, with 78% disapproving. The Peruvian Congress had disapproval ratings of 89%, 90%, and 91% ub Hanuary, February, and March.

By January 2023, the Peruvian capital of Lima was inundated by protesters, mostly Peru's indigenous people.

The protests, which have been blockading major highways as well as protesting in major cities, has been a grassroots effort without any clear leader.

The Peruvian military has been beating and killing indigenous protesters.

"We are from Chota in Cajamarca. We have come to Lima to defend our country, considering we are under a dictatorial government ... which has stained our country with blood," Yorbin Herrera, a protester from Cajamarca, told Al Jazeera.

"I am upset. Angry. Traumatized and shocked by what is happening here," Luis Garro, another anti-government protester, told Al Jazeera. "I believe that the people are going to force Dina Boluarte and the Congress out."

"The political situation in Peru has several layers ... [and] if you look a bit further down into the social order of things ... this can't just be about one specific moment in 2023, or 2022," Alonso Gurmendi, a lecturer in international relations at the University of Oxford, told Al Jazeera. "There is a long history of exclusion of people from Indigenous descent, and Indigenous people in Peru have been left out of the economic growth [Peru has seen], where even if GDP is growing, and the macroeconomics numbers are doing well, every day people are left alone if they cannot privatise their basic needs. There is no good health care; there is no public housing, [and] public education is not well funded. So the population feels there is a double system and all of these protests boil down to this difference, between the part

of Peru that is able to take advantage of the ‘economic miracle’, and the part of Peru that isn’t, that is still left behind.”

Peru’s Congress is notoriously corrupt and dominated by right-wing oligarchs.

The US, Canada, and mining companies from the US, Canada, Switzerland, and Australia support unelected President Dina Castillo.

14 Latin American nations, including Mexico, Columbia, and Argentinian have condemned the US coup in Peru and expressed support for President Pedro Castillo.

Peru

keyword: HTML color name



St. Peter’s Church

24 December 2023: “St. Peter’s Church is located in the Town of St. George, Bermuda and is a UNESCO World Heritage Site. It is the oldest Anglican Church outside of the British Isles and the oldest church in continuous use in the New World. Established in 1612 when Bermuda was settled by the Virginia Company, the church was rebuilt many times due to storm damage, and eventually was reconstructed of stone in 1826. In 2012, for the late Queen Elizabeth II’s Diamond Jubilee year, St. Peter’s was granted the royal designation of “Their Majesties Chappell,” a title first used for the church during the reign of King William III and Queen Mary II.” —CIA World Factbook (material that expires after 30 days)



petrichor

The pleasant, earthy smell that is produced by the first rain falling on dry soil after a long period of warm, dry weather.

Petra is Greek for rock or stone and ikhor is GHreek for the ethereal fluid that is the blood of the Greek gods.

pf

keyword: COBOL reserved word (z/OS)

pH

According to the U.S. Department of Interior, the definition of pH is “pH is a measure of how acidic/basic water is. The range goes from 0 - 14, with 7 being neutral. pHs of less than 7 indicate acidity, whereas a pH of greater than 7 indicates a base. pH is really a measure of the relative amount of free hydrogen and hydroxyl ions in the water. Water that has more free hydrogen ions is acidic, whereas water that has more free hydroxyl ions is basic.”

pH was invented by Danish chemist Søren Peder Lauritz Sørensen at the Carlsberg Laboratory in 1909. It was later modified in 1924 to its modern form.

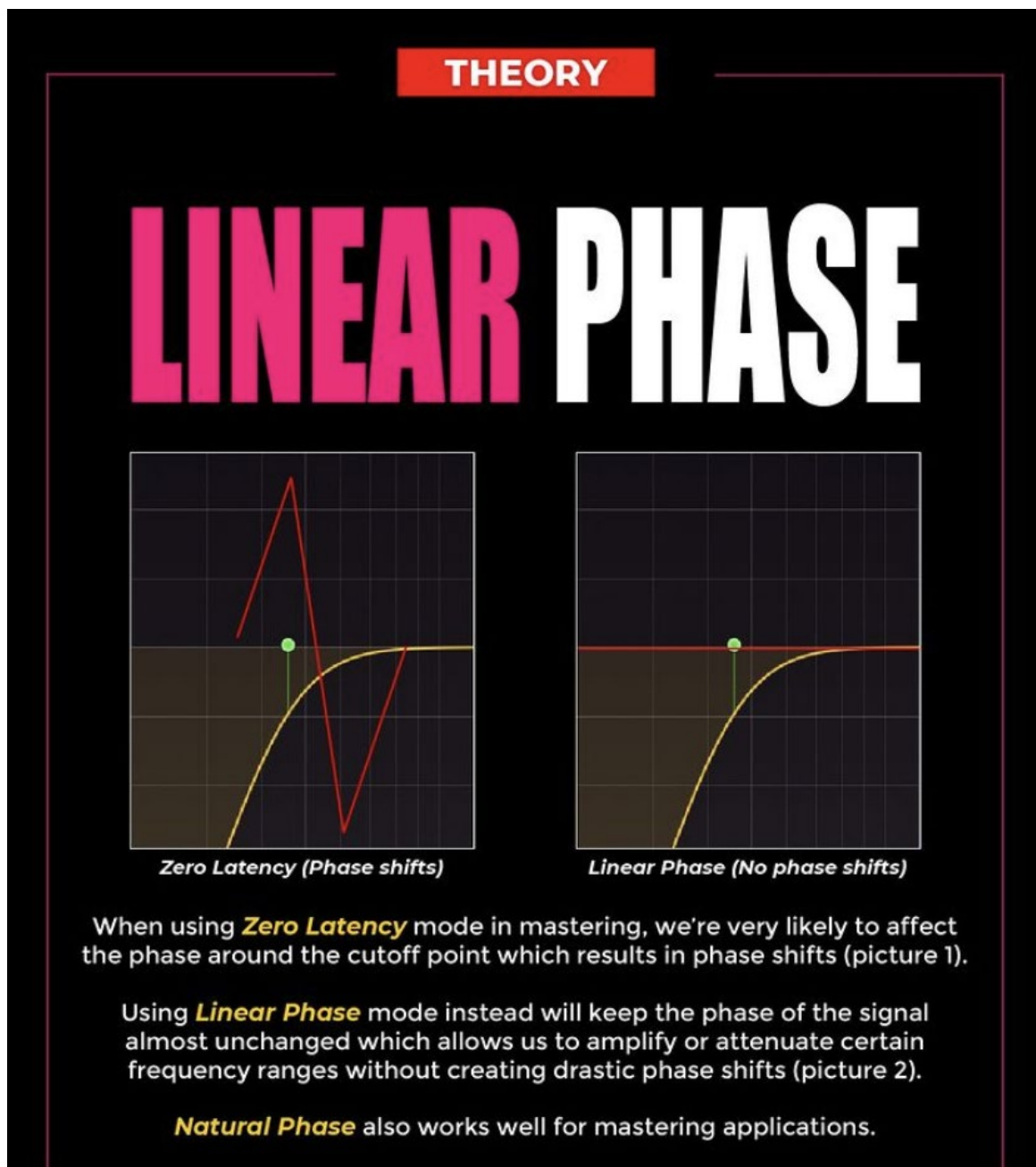
Sørensen wrote the H stands for hydrogen, but he never wrote and said what the p stands for. There is a lot of modern speculation, but nobody will ever know for certain.

ph

keyword: COBOL reserved word (z/OS)

phase

16 November 2023: “phase cheat sheet” — [Solar Heavy](#)



16 November 2023: “Terminology is Pro-Q specific. Nat Phase is the typical analog phase decramped. Min Phase is also decramped but the phase shift in the high end is slightly offset vs the frequency (their trick to decramp with zero latency). Unless absolutely necessary, no1 should use linphaseeq” —[SIMPLETOM](#)

phaser

26 December 2023: “Phaser: Modifies the sound by creating a series of notches in the frequency spectrum, giving a sweeping, spacey effect.

Phaser and flanger distort the signal more and can be used as creative effects to create interesting transitions and movement in your mixes.” —[Nathaniel W.](#)

See: [phenylalanine](#)

Phoenix

18 July 2023: “In the last 8 years, over 450 people have been charged under an obviously unconstitutional Phoenix city ordinance that makes dressing to “attract attention” arrestable.

The majority of those charged--a wildly disproportionate amount--are Black.”
—[Keegan Stephan](#)

19 July 2023: “Phoenix just had its hottest night in recorded history, only dipping to 97°F, and has seen a record-smashing 20 consecutive days of 110°F+ heat.” —[Colin McCarthy, UC Davis, atmospheric scientist](#)

physics

“Physics is the natural science of matter, involving the study of matter, its fundamental constituents, its motion and behavior through space and time, and the related entities of energy and force. Physics is one of the most fundamental scientific disciplines, with its main goal being to understand how the universe behaves. A scientist who specializes in the field of physics is called a physicist.” —[Wikipedia](#)

piano

What’s the difference between a piano and a fish?
You can’t tuna fish.

What do you get when you drop a piano into a mine shaft?
A Flat Miner.

What do you get when you drop a piano on an army base?
A Flat Major.

See: .pic — file extension

pic

keyword: COBOL reserved word (z/OS)

Pablo Picasso

“When I was a child, my mother said to me, ‘If you become a soldier, you’ll be a general. If you become a monk, you’ll end up as the pope.’ Instead, I became a painter and wound up as Picasso.” —Pablo Picasso



picture

keyword: COBOL reserved word (z/OS)

Piggly Wiggly

“Piggly Wiggly was the first self-service grocery store. It was founded in 1916 in Memphis, Tennessee.

At the time of its founding, grocery stores did not allow customers to gather their goods. Instead, a customer would give a list of items to a clerk, who would then collect them throughout the store.

Piggly Wiggly introduced the innovation of allowing customers to go through the store, gathering their goods, thus cutting costs and lowering prices. Losses due to easier shoplifting were more than offset by profits from increased impulse purchasing.

This style of grocery store came to be known as a “groceteria”, reminding people of cafeterias, another relatively new, self-service idea.

At its peak in 1932, the company operated 2,660 stores and posted annual sales in excess of \$180 million.” —[charmene harbert](#)



pillow

The first pillows, from ancient Mesopotamia around 7,000 BCE, were made of stone.

Pillows didn't become popular until the Industrial Revolution. In antiquity, only the wealthy had pillows. As recently as Medieval England, pillows were primarily used for women in labor and it was considered a sign of weakness for a man to use a pillow.

Pink

operating system

Proprietary OS by Apple for the Apple Macintosh.

Apple Macintosh

Pink

keyword: HTML color name

Pink
#FFC0CB

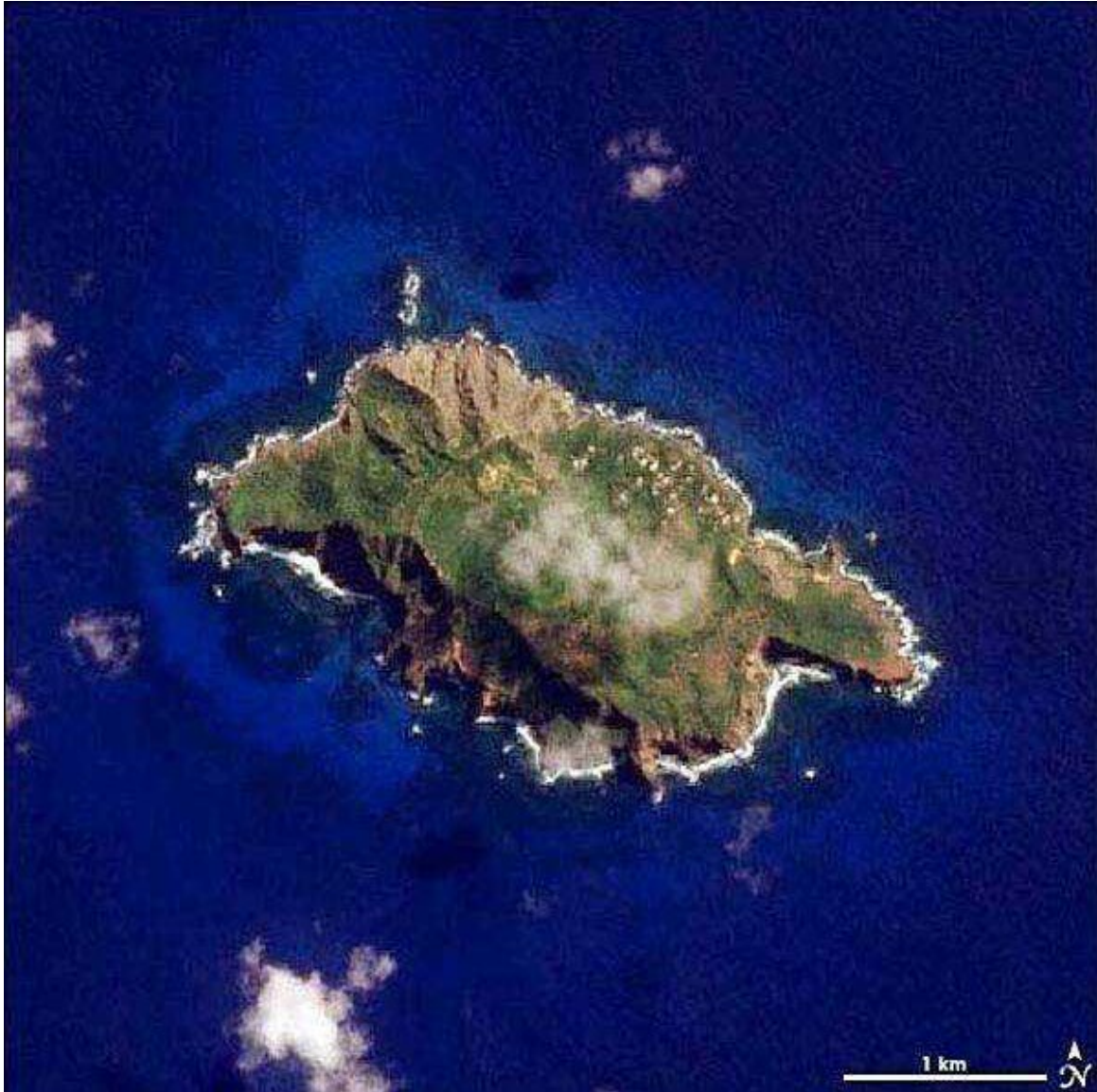
Pinnochio

Pinnochio's name is made from *pino*, meaning pine, and *occhio*, meaning eye.

Pitcairn Island

27 December 2023: "The volcanic island shown here is Pitcairn Island, the island on which the sailors from the British ship HMS Bounty settled after their mutiny in

1790. High cliffs surround most of the island, making access difficult - likely a primary reason the mutineers chose this landfall. The center of the island is green, covered with a dense forest. The island's only inhabitants (descendants of the Bounty mutineers and their Tahitian companions) live in Adamstown, the bright spots near the northeast shore. A faint semi-circle around the top of the island outlines an ancient crater, evidence of Pitcairn's volcanic past.” —CIA World Factbook (material that expires after 30 days)



pitch bend

keyword: MIDI comamnd

En hex (where n is the channel number)

2 paraaemters

parameter 1: lsb

parameter 2: msb

pizza box laptop

5 January 2024: “WIP” — [Corey](#)



Pizza Hut

27 December 2023: “Pizza Hut is set to lay off more than 1,200 delivery drivers in three California counties in the coming year, ahead of a new state law that boosts the fast-food minimum wage.” — [CBS News](#)

28 December 2023: “The CEO of Pizza Hut made so much last year that he could personally pay for the full raise for all 1,200 workers and still earn over 4.2 million a year more than each of them.

This isn’t about new laws, this is about greed and exploiting both consumers and workers.” — [Isaac G. Bryan](#)

See: .pkg — file extension

Plan 9 from Bell Labs

operating system

Proprietary OS by Bell Labs.

Plankalkül

programming language

year created: 1943-1945 (published 1948)

created by: Konrad Zuse

predecessors: none (unique language)

planned obsolescence

“What is planned obsolescence? In short, it is one of the most sinister policies created by humans.

It is the deliberate engineering of goods to deteriorate or become obsolete faster to require replacement and increase profits

The testing ground was the lightbulb when the Phoebus cartel engineered the lifespan from 2,500 hours to just 1,000, drastically increasing sales

Decades later, Apple would agree to pay \$113 million to settle a lawsuit over intentional iPhone slowdowns

We see this with our architecture as well. What’s the fun (\$\$\$) in creating something breathtaking that lasts for thousands of years when you can make dilapidated eyesores that require renovations every 30 seconds?

How is it that the Romans built roads to last thousands of years yet our modern ones require constant maintenance?

I truly believe much of the human condition now, mental illness, chronic illness, is planned obsolescence being extended to humanity by Big Pharma and Big Food for profits

We require a level of “maintenance” (and expensive maintenance at that) we’ve never seen before.” —[Ashley St. Claire](#)

plate

The three main parts of a plate are the rim (outer edge), base (the underneath surface), and the well (where the food is placed).

Plato

“Wise men speak because they have something to say; Fools speak because they have to say something.” —Plato

playground

noun “Any park or recreational area specifically designed to be used by children that has play equipment installed, including public grounds designed for athletic activities” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Plovdiv

Plovdiv, Bulgaria, is about 6,000 years old.

audio plugins

13 October 2023: “literally all the plugins I use in one screenshot” —[Solar Heavy](#)

More plugins...	Q1 Stereo	Fruity Limiter	Newtime	Magma Lil Tube Stereo
Compression	Q10 Stereo	L1 limiter Stereo	Newtone	OneKnob Driver Stereo
Audiocacion Compressor	REQ 6 Stereo	L2 Stereo	Pitcher	Stereo Enhancer
CLA-76 Stereo	Filter	OneKnob Louder Stereo	ValhallaRoom	A1StereoControl
FabFilter Pro-C	EQUO	Mastering	Vocodex	Doubler2 Stereo
RCompressor Stereo	FabFilter Micro	Butch Vig Vocals Stereo	New	Kaleidoscopes Stereo
VComp Stereo	FabFilter Simplon	CLA Vocals Stereo	Distructor	PS22 Split Stereo
Controller	Fruity Filter	DeEsser Stereo	Frequency Shifter	PS22 Spread Stereo
Control Surface	Fruity Love Philter	F6-RTA Stereo	Frequency Splitter	S1 Imager Stereo
Fruity Formula Controller	Fruity Parametric EQ	Frequency Splitter	Hyper Chorus	S1 Shuffler Stereo
Fruity Peak Controller	Fruity Parametric EQ 2	GW MixCentric Stereo	LuxeVerb	Transient Shaper
Fruity X-Y Controller	OneKnob Filter Stereo	GW PianoCentric Stereo	Multiband Delay	OneKnob Pressure Stereo
Fruity X-Y-Z Controller	Flanger	IMPusher Stereo	Newtime	Transient Processor
Delay	FabFilter Volcano 2	iZotope Ozone 5	Pitch Shifter	Transient Shaper
CLA EchoSphere Stereo	Fruity Chorus	iZotope Ozone 5 Dynamics	Tuner	Visual
FabFilter Timeless 2	Fruity Flanger	iZotope Ozone 5 Equalizer	VFX Envelope	Fruity Big Clock
Fruity Delay 2	Fruity Flangus	iZotope Ozone 5 Exciter	VFX Sequencer	Fruity dB Meter
Fruity Delay 3	Fruity Phaser	iZotope Ozone 5 Imager	Vintage Chorus	Fruity HTML NoteBook
Fruity Delay Bank	MetaFlanger Stereo	iZotope Ozone 5 Maximizer	Vintage Phaser	Fruity NoteBook
H-Delay Stereo	Vintage Chorus	L1 limiter Stereo	Patcher	Fruity NoteBook 2
Lofi Space Stereo	FX	L1+ Ultramaximizer Stereo	Patcher	Fruity Spectroman
Spaceship Delay	Blue Cat's Chorus 4 (Stereo)	L2 Stereo	VFX Color Mapper	PAZ- Analyzer Stereo
SuperTap 2-Taps Stereo	CHOWTapeModel	LoAir Stereo	VFX Key Mapper	PAZ- Frequency Stereo
SuperTap 6-Taps Stereo	dbblue Glitch v1.3	MannyM TripleD Stereo	VFX Keyboard Splitter	PAZ- Meters Stereo
Distortion	Effector	MV2 Stereo	VFX Level Scaler	Razer Chroma
Distructor	Frequency Shifter	NS1 Stereo	Phaser	s(M)exoscope
Fruity Blood Overdrive	GTR Tool Rack Stereo	OneKnob Brighter Stereo	FabFilter Volcano 2	SPAN
Fruity Fast Dist	Guitar Rig 5	OneKnob Louder Stereo	Vintage Chorus	Tuner
Fruity Soft Clipper	Hyper Chorus	OneKnob Phatter Stereo	Vintage Phaser	VU Meter Stereo
Fruity Squeeze	Kaleidoscopes Stereo	OneKnob Pressure Stereo	Reverb	Wave Candy
Fruity WaveShaper	Kramer Tape Stereo	PlaylistRider Stereo	CLA EchoSphere Stereo	WLM Meter Stereo
GTR Amp Stereo	LoAir Stereo	PSE Stereo	IR-L full Stereo	ZGameEditor Visualizer
Hardcore	OneKnob Pumper Stereo	PuigTec EQP1A Stereo	Lofi Space Stereo	
Kramer Tape Stereo	Pitch Shifter	RBass Mono	Luxeverb	• Categories
LoAir 5.1	StudioRack Stereo	RBass Stereo	MannyM Reverb Stereo	○ Simple
Magma Channel Strip Stereo	Gain	RCompressor Stereo	OneKnob Wetter Mono	○ Tree
Magma Lil Tube Stereo	Fruity Balance	RDeEsser Stereo	OneKnob Wetter Mono-Stereo	
Maserati B72 Stereo	Fruity PanOMatic	Renaissance Axx Stereo	OneKnob Wetter Stereo	
OneKnob Driver Stereo	Fruity Send	REQ 6 Stereo	RVerb Stereo	
OneKnob Pressure Stereo	Fruity Stereo Enhancer	RVox Stereo	TrueVerb Stereo	
Dynamics	Fruity Stereo Shaper	Sibilance Stereo	ValhallaRoom	
Fruity Compressor	Legacy	Sub Align Stereo	ValhallaShimmer	
Fruity Limiter	Controller >	T-De-Esser	ValhallaVintageVerb	
Fruity Multiband Compressor	Delay reverb >	TG12345 Stereo	Saturation	
Fruity Soft Clipper	Distortion >	Transient Processor	Butch Vig Vocals Stereo	
Maximus	Dynamics >	Misc	GW MixCentric Stereo	
Renaissance Axx Stereo	Filter >	Edison	GW PianoCentric Stereo	
Soundgoodizer	Flanger >	Effector	IMPusher Stereo	
Transient Processor	Gain >	Fruity LSD	JJP-Drums Stereo	
EQ	Patcher >	Fruity Scratchr	JJP-Strings-Keys Stereo	
F6-RTA Stereo	Visual >	Fruity Vocoder	Kramer Tape Stereo	
FabFilter Pro-Q	Limiter	Gross Beat	LoAir 5.1	
H-EQ Stereo	FabFilter Pro-L	GTR Tuner Mono	Magma Channel Strip Stereo	

22 December 2023: “Adding richness and depth

One of my favorite tools to add richness, “weight” and depth to my sounds and buses.

Blackbox HG-2” — [Nathaniel W.](#)

NOTE: This is available both as a digital plugin and as an actual hardware device.



28 December 2023: “The mistake I made earlier in my career

There was a point when I first time started to achieve good results.

I found some one working formula for me. Before you destroy me with questions, the formula is not exact chains and presets.

By formula I mean the techniques and plugins that I figured out how to use

And then, I started to apply this everywhere. Whatever song I had, I did pretty much the same things.

As a result, some songs sounded really good, and some sounded really bad.

It depended on the song. If material were a good fit for my method then it worked. If not, then it didn't work. Especially when songs were in different genres. And I lost some artists because of it.

I know it may be very exciting to hear great results for the first time, but please never stick with the methods for all the songs. Keep it in mind, but never think that “you found out a method how to make a good sound and now you don't need anything else”.

As I mentioned earlier today, right now I spend very much time just picking the right tools finding a good fit for the song.

In my current workflow, I'm not trying to equalize and compress the sh*t out of my sounds. That's why I'm not trying to achieve everything with simple EQs and compressors.

I'm trying to do very very little with my tools, but get a massive improvement because of how this tool sounds. I can not affect its character, that's why I pick what will sound the best on the particular song.

This approach allows to get the most out of the initial sound, saving its tone and naturalness, but also color it and fit in the mix. The thing is that the color and character should fit the genre and the composition itself.

The results you will be getting won't compare to working on Pro-Q and Pro-C only, or using the same chains every time. But it's worth it.

I know it sounds complicated but don't think too much about it.

Just don't stop to experiment and don't stop to try new things in new scenarios + listen to what experienced engineers say. What tools and techniques work well in what genres and with what sounds. And so on.

Don't be lazy to set up a few compressors and switch between them to choose which sounds the best.

Same with analog modeled EQs.

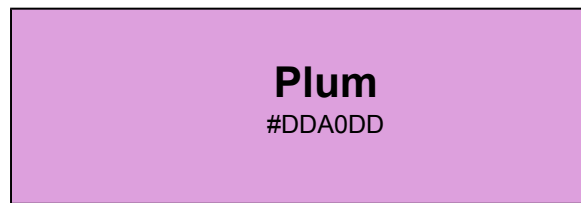
At least try some new time to time, and if it's not working then get back to your go-to plugin.

But accumulating experience with different tools and techniques is a must.”

—[Nathaniel W.](#)

Plum

keyword: HTML color name



plus


keyword: COBOL reserved word (z/OS)

plutocracy

“PLUTOCRACY — Government by the wealthy.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

P.M.

P.M. is an abbreviation for Post Meridiem, which means after the Sun has crossed the meridian line (noon).

See:  — file extension

Lake Pontchartrain

“The power line at Lake Pontchartrain, Louisiana, simply and clearly show the curvature of the Earth” — [Massimo](#)



pointer

keyword: COBOL reserved word (z/OS)

police

18 March 2023: “Timothy Hyatt, a Denver police sergeant, was convicted of attempted sexual assault on a 14-yr-old.

He was sentenced to 4 yrs probation. His record will be erased upon completion.

Crystal Mason was convicted of casting a provisional ballot (voting).

She was sentenced to 5 yrs.” — [Talbert Swan](#)

19 September 2023: “Per multiple supreme court decisions since 1981, cops have no Constitutional duty to protect or serve.

If the cops have no duty to protect you then the only point of their existence is to be

used against you.” —[Danarama](#)

19 March 2023: “Cops took a 4 month old baby from his mom over 5 grams of weed. Now they’re prosecuting mom for talking to the press

Police stopped a Black couple in Tennessee — and took their children

Bianca Clayborne and Deonte Williams’ case fits pattern of child welfare services fueling disparities in who gets to remain a family” —[Amazon Piss Jugs](#)

19 March 2023, London: “The phrase “no shit Sherlock” seems woefully inadequate here. Perhaps that trust might be easier to build if more than 1,500 police officers hadn’t also been accused of violence against women in the last 6 months alone.

[Headline] Sarah Everard murder will harm women’s trust in police for generations, says top officer

A female police chief says the case continues to divide police from public” —[Daniel Sohege](#)

police of the world

18 March 2023: “Why the ICC did not indicate these war criminals.

75% of Americans believe the U.S. should be the world’s police

Even after...

The US created the Taliban by arming the Mujahideen to fight the Soviets

Armed Saddam to fight Iran then overthrew him which led to a civil war in Iraq

Overthrew Gaddafi to stop a gold-backed currency and turned Libya into a failed state

Armed known terrorist groups in Syria in an attempt to overthrow Bashar Assad

The military industrial complex thanks you. Your ignorance is their strength. Stay distracted America.” —[Black diaspora Voice](#)



pork

U.S. pork is banned in China, the European Union, New Zealand, Russia, Taiwan, and a total of 160 nations because of the feed additive ractopamine, which is linked to many major health issues.

“I worked in a slaughterhouse for 3 years I can confirm for a fact pork has worms and parasites, we used to cook cheek meat in the steam sink and they fly out within seconds. One of the reasons I quit eating all meats, cooked or u cooked they still have parasites.” — [Great White Buffalo](#)

pornography

1 September 2023: “I cannot stress enough that if Ben Franklin were alive today the constitution wouldn’t just implicitly refer to P*rnhub but would explicitly refer to it by Ben Franklins favorite categories” — [Brendel](#)

port

keyword: VHDL reserved key word

position

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

position_b

keyword: SQL reserved word (z/OS)

position_mb

keyword: SQL reserved word (z/OS)

positive

keyword: COBOL reserved word (z/OS)

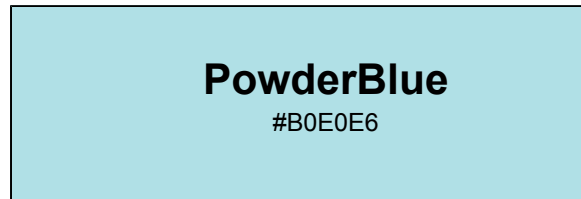
postponed

keyword: VHDL reserved key word

See: potato

PowderBlue

keyword: HTML color name



power

function: C math.h library function: stands for raise to POWER of

poverty

20 March 2023: According to [Randell Hynes](#):

“—50 million Americans live in poverty,”

“—12 million are kids,”

“—26 million are Seniors,”

“—Half of Veterans are Seniors,”

“582,000 Americans living on the streets.” —[Randell Hynes](#)

4 July 2023: “The biggest lesson I learned from poverty is poor people will help you as much as they possibly can and rich people will make you gravel and owe them in return!” —[NerdGirl Manda](#)

3 October 2023: “So today my wife and I sat outside the dollar store and realized we don’t have \$5 dollars between us to buy butter.

We left and drove home, she held my hand and said, we have a roof over our head and we love each other.

If you are struggling financially, you aren’t alone. ♥” —[The Rob Paradigm](#)

10 December 2023: “every year someone gets bothered because I point out that It’s a Wonderful Life and A Christmas Carol warn of the dangers of predatory capitalism. what did you think these stories were saying” —[Owl! at the Library](#)

17 December 2023: “Time for your annual reminder that, according to A Christmas Carol, Bob Cratchit makes 15 shillings a week. Adjusted for inflation, that’s \$530.27/wk, \$27,574/yr, or \$13.50/hr.

Most Americans on minimum wage earn less than a Dickensian allegory for destitution.” —[Chris Thompson](#)

6 January 2024: “There is a homeless woman screaming at the top of the hill. But you know what? I ain’t even mad. It’s freezing out there, and I have the privilege of being inside a tent wrapped in a blanket.

Housed ppl don’t care. They just want the disturbance gone and back to their lives of mindless consumption.” —[Bodhi](#)

8 January 2024: “An official count of the deaths of homeless people would no longer be published in England and Wales under proposals to increase the efficiency of health data that campaigners have called “callous”.

In a move that advocates for homeless people fear will increase the invisibility of the most vulnerable and amount to sweeping the problem under the rug, the Office for National Statistics is consulting on dropping the annual bulletin, which showed an estimated 741 deaths among homeless people in 2021.

The plan is included in a series of proposed changes to official figures that the ONS says will provide “an improved and more efficient health and social care statistical landscape”.

The homelessness charity Crisis, which is urging the government to make a U-turn, said the plan was “deeply concerning, and will only ensure this needless suffering continues out of sight”.

“The injustice faced by people dying on the street must not go unreported,” said Francesca Albanese, executive director of policy and social change at the charity.

Gill Taylor, who leads an independent project at the Museum of Homelessness counting deaths among homeless people, said the proposal was symbolic of the way the government “sees homelessness as ‘a lifestyle choice’,” a reference to a tweet posted in November by the former home secretary Suella Braverman.

“Now is not the time to be turning away from who these people are and why they died,” she said. “Everywhere in the public sector, change only comes as a result of an evidence base, and without it we are afraid change won’t happen.”

Taylor said scrapping the statistic would be “a very callous thing to do at a time when we know there is an absolute crisis in homelessness and more people are dying”.

The ONS will continue to collect the data on the deaths of homeless people, but will include it in overall mortality figures rather than publishing it separately. It said the data, which has been published since 2018, was experimental and amounted to an estimate.” —[The Guardian](#)

10 January 2024; Peter Daou replies to the claim by paid DNC spokesperson [Victor Shi](#): “Ignore the headlines. Our economy is booming. There is no recession. And it is all because of Joe Biden.” “

- Record high homelessness
- Record high suicide rates
- Doubling child poverty
- Soaring cost of living
- Widespread food insecurity
- Stagnant minimum wage
- Dwindling personal savings
- Plummeting life expectancy
- Obscene income inequality
- Teen mental health crisis
- Skyrocketing military budget
- Unrelenting gun violence
- Pervasive racism and bigotry
- Abuse of asylum-seekers
- Raging climate emergency
- GENOCIDE IN PALESTINE” —[Peter Daou](#)

PPP loans

“Why can PPP loans be forgiven but not student loans?

”Asking for someone who didn’t buy a private jet during the pandemic.”
—[@hats_n_politics](#)

From 1862 to 1969, every state in the union had free public higher education. California Governor Ronald Reagan cancelled it in California because he believed it was “welfare” for Black students.

See: .ppt — file extension

See: .pptx — file extension

pragma

keyword: Ada reserved key word

Terry Pratchett

“Science is not about building a body of facts. It is a method for asking awkward questions and subjecting them to a reality-check, thus avoiding the human tendency to believe whatever makes them feel good.” —Terry Pratchett

“People had always dreamed of a unified world. We thought it would be a richer one. It wasn't. It meant that the Inuit got educated and learned cost accountancy, but it didn't mean that the German learned to hunt whales with a spear. It meant everyone learned how to press buttons, and no one remembered how to dive for pearls.” —Terry Pratchett

precision

keyword: SQL reserved word (z/OS)

Predjama Castle

26 December 2023: “Predjama Castle, built in the mouth of a cave complex set halfway up a 123 m (400 ft) vertical cliff face at the end of a valley in southwest Slovenia, is known as one of the most-extraordinary castles in the world. The first castle, constructed in 1274 in the Gothic style, was destroyed in a siege and later rebuilt, only to be destroyed again in an earthquake in 1511. In 1570, the current castle was rebuilt in the Renaissance style, pressed next to a vertical cliff under the original medieval fortification. The castle has remained in this form, virtually unchanged, to the present day.” —CIA World Factbook (material that expires after 30 days)



premature optimization

“There is no doubt that the grail of efficiency leads to abuse. Programmers waste enormous amounts of time thinking about, or worrying about, the speed of noncritical parts of their programs, and these attempts at efficiency actually have a strong negative impact when debugging and maintenance are considered. We *should* forget about small efficiencies, say about 97% of the time: premature optimization is the root of all evil.”

“Yet we should not pass up our opportunities in that critical 3%. A good programmer will not be lulled into compacency by such reasoning, he will be wise to look carefully at the critical code; but only *after* that code has been identified. It is often a mistake to make a priori judgments about what parts of a program are really critical, since the universal experience of programmers who have been using measurement tools has been that their intuitive guesses fail. After working with such tools for seven years, I’ve become convinced that all compilers written from now on should be designed to provide all programmers with feedback indicating what parts of their programs are costing the most; indeed, this feedback should be supplied automatically unless it has been specifically turned off.” —Structured Programming With Go To Statements, Donald Knuth

pre-purchased deals

One of the things I learned about narcissist from watching Chip Frye is the pre-purchase of deals.

The narcissist will occasionally offer a “gift”. It is always something the narcissist has extra of. It is not based on the needs or desires of the recipient. It is always something that the narcissist likes and happens to have some extra of.

The reason it isn't merely a thoughtless gift is that the narcissist will eventually use it to demand something the narcissist wants. “I gave you a banana [that was old enough that he would have thrown it away otherwise], it is only fair you do some expensive favor for me.”

I made the mistake of being polite and not rejecting the offer of a gift, even if I didn't want it, just to show respect for the kind thought behind the gift.

It was never really a gift. The narcissist is setting up a future transaction where the narcissist gets to set what it is the narcissist wants in return without the other person realizing that they have entered into a bargain with unfair conditions.

Yevgeny Prigozhin

23 August 2023: Yevgeny Prigozhin, leader of the Wagner Group was killed in a plane crash. At least 10 people died in the in the Embraer Legacy aircraft crash on a flight from Moscow to St. Petersburg.

23 August 2023: US President Joe Biden said “I don't know for a fact what happened, but I'm not surprised. He also said he did not rule out Russian President Vladimir Putin's possible involvement in the plane crash, adding “It's not much that happens that Putin is not behind.”

primate

“Primates include monkeys, apes and humans. These mammals are characterized by detailed development of the hands and feet, a shortened snout, and a large brain.”

—[Groups of Mammals](#)

Prince (musician)

“A two party system, the lesser of two dangers, the illusion of choice. A veiled form of fascism where nothing really changes and you never had a voice.” —Prince

print

keyword: PHP reserved word

printf

function: C stdio.h library function: stands for PRINT Function

printing

keyword: COBOL reserved word (z/OS)

prior

keyword: SQL reserved word (ANSI, Oracle)

prison labor

13 December 2023: “Prisoners forced to work at McDonald’s, other employers, lawsuit says

Modern day slavery, y’all Prisoners forced to take these shifts or go to solitary, and there's no choice "where" they are assigned to work

The prison industrial complex is also a slave state.” —[Amazon Piss Jugs](#)

prison ships

7 August 2023: “Housing refugees on prison ships is morally indefensible. Political cowardice comes at a cost — and the most vulnerable will pay the highest price.

That’s why I’ll continue to campaign alongside my community for an immigration system based on compassion, dignity and respect.” —[Jeremy Corbyn](#)

private

keyword: Ada reserved key word

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

See: [@private](#) — Objective C

private prisons

8 August 2023: “Despite Promises of Reform, Private Prison Companies Still Thriving Under Biden: ACLU” —[Nina Turner](#)

14 August 2023: “New Jersey Activists Won a Ban on Private Prisons, Now Biden Wants to Reverse It

The Biden administration is backing CoreCivic in a lawsuit against a state law banning contracts with private prisons.” —[truthout](#)

2 September 2023: “[regarding Biden administration backing CoreCivic in a lawsuit against a New Jersey law banning contracts with private prisons:]

Biden promised to end private prison contracts, but instead he’s defending these corporate jailers infamous for profiting off of abusing human beings in cages.” —[Holding Biden Accountable](#)

privilege

5 August 2023: “If you’ve never had a Supreme Court case decide if you have the same rights as others, you have privilege.” —[jaynecobb](#)

privileges

keyword: SQL reserved word (ANSI, Oracle)

procedure

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

procedure-pointer

keyword: COBOL reserved word (z/OS)

procedures

keyword: COBOL reserved word (z/OS)

proceed

keyword: COBOL reserved word (z/OS)

processing

keyword: COBOL reserved word (z/OS)

Apple ProDOS

operating system

Proprietary OS by Apple for the Apple II family

producer

20 November 2023: “Been producing as a career since 2008. I’ve learned:

1. Respect everybody but rely on nobody.
2. Take money over a favor. Favors can expire immediately after they’re offered.
3. If you’re afraid to ask for compensation now, fall in love with starving.
4. Don’t automatically resist trends.
5. Do what you don’t love to keep being able to do what you DO love.” —[DJ Pain](#)

[1](#)

program

keyword: COBOL reserved word (z/OS)

program change

keyword: MIDI comamnd

Cn hex (where n is the channel number)

l paraaemter

paramater: instrument number

program-id

keyword: COBOL reserved word (z/OS)

prohibited area

noun “Any area where local authorities have deemed it unlawful to discharge a firearm” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

prohibited weapons

noun “Weapons specifically identified under (Penal Code Section 16590)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

California law: **PENAL CODE - PEN 16590**

PART 6. CONTROL OF DEADLY WEAPONS [16000 - 34400] (*Part 6 added by Stats. 2010, Ch. 711, Sec. 6.)*

TITLE 1. PRELIMINARY PROVISIONS [16000 - 17360] (*Title 1 added by Stats. 2010, Ch. 711, Sec. 6.)*

DIVISION 2. DEFINITIONS [16100 - 17360] (*Division 2 added by Stats. 2010, Ch. 711, Sec. 6.)*

As used in this part, “generally prohibited weapon” means any of the following:

- (a) An air gauge knife, as prohibited by Section 20310.
- (b) Ammunition that contains or consists of a flechette dart, as prohibited by Section 30210.
- (c) A ballistic knife, as prohibited by Section 21110.
- (d) A belt buckle knife, as prohibited by Section 20410.
- (e) A bullet containing or carrying an explosive agent, as prohibited by Section 30210.
- (f) A camouflaging firearm container, as prohibited by Section 24310.
- (g) A cane gun, as prohibited by Section 24410.
- (h) A cane sword, as prohibited by Section 20510.
- (i) A concealed dirk or dagger, as prohibited by Section 21310.
- (j) A concealed explosive substance, other than fixed ammunition, as prohibited by Section 19100.
- (k) A firearm that is not immediately recognizable as a firearm, as prohibited by

Section 24510.

- (l)ÂA large-capacity magazine, as prohibited by Section 32310.
 - (m)ÂA leaded cane or an instrument or weapon of the kind commonly known as a billy, blackjack, sandbag, sandclub, sap, or slungshot, as prohibited by Section 22210.
 - (n)ÂA lipstick case knife, as prohibited by Section 20610.
 - (o)ÂMetal knuckles, as prohibited by Section 21810.
 - (p)ÂA metal military practice handgrenade or a metal replica handgrenade, as prohibited by Section 19200.
 - (q)ÂA multiburst trigger activator, as prohibited by Section 32900.
 - (r)ÂA shobi-zue, as prohibited by Section 20710.
 - (s)ÂA short-barreled rifle or short-barreled shotgun, as prohibited by Section 33215.
 - (t)ÂA shuriken, as prohibited by Section 22410.
 - (u)ÂAn unconventional pistol, as prohibited by Section 31500.
 - (v)ÂAn undetectable firearm, as prohibited by Section 24610.
 - (w)ÂA wallet gun, as prohibited by Section 24710.
 - (x)ÂA writing pen knife, as prohibited by Section 20910.
 - (y)ÂA zip gun, as prohibited by Section 33600.
- (Amended by Stats. 2021, Ch. 434, Sec. 22. (SB 827) Effective January 1, 2022.)*

See: proline

prompt

keyword: JavaScript windows method

propaganda

Propaganda techniques:

Agenda Setting

Appeal to Fear

Appeal to Prejudice

Beautiful People

Big Lie

Classical Conditioning

Cognitive Dissonance

Cult of Personality

Demonizing the Enemy
Demoralization
Dictat (use of image to show desired action)
Disinformation
Divide and Rule
Euphemism
Euphoria
FUD (Fear, Uncertainty, and Doubt)
Firehose of Falsehood
Flag Waving
Flak
Foot in the Door
Framing
Gaslighting
Gish Gallop
Glittering Generalities
Guilt by Association
Half Truth
Inevitable Victory
Information Overload
Intentional Vagueness
Join the Crowd
Labeling
Lattitudes of Acceptance
Limited Hangout
Loaded Language
Love Bombing
Milieu Control
Misuse of Statistics
Obfuscation
Operant Conditioning
Oversimplification
Paltering (selected use of true statements to mislead)
Pinsée Unique (use of overly simplistic phrases)
Plain Folk
Quotes out of Context
Rationalization
Repetition
Scapegoating
Semantic Satiation
Smear Campaign
Testimonials
Third Party Technique

Transfer
Unstated Assumption
Whataboutism

See: `@property` — Objective C

propertyIsEnum

keyword: JavaScript windows method

protected

keyword: Ada reserved key word

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

See: `@protected` — Objective C

Protocol

keyword: Objective-C word

See: `@protocol` — OBJECTIVE C

prototype

keyword: JavaScript object

pro-union?

At 11:32 am on 20 April 2023, Joe Biden claimed: “I make no apologies for being the most pro-union president in American history.” —[Joe Biden](#)

that Cap you brought 6 unions leaders including myself to the Whitehouse and we was handed a pamphlet THATS IT!.... It's been crickets ever since all we got is US no pro act no accountability just people power photo ops doesn't make you pro union nor do tweets. —[Christian Smalls](#), President of Amazon Labor union

In 1988 Biden dropped out of the presidential race when he was caught plagiarizing British Labour Party leader Neil Kinnock's speech. Biden claimed to have descended from coalminers. His only ancestor in the coal industry was Patrick F. Blewitt, a boss, not a coal miner.

Biden voted for NAFTA, supported the Trans-Pacific Partnership, authored the 2005 bankruptcy law, and authored the mass incarceration law.

During 2011 Biden refused to speak out against then Wisconsin Governor Scott Walker's attacks on unions.


During the 2011 Verizon strike, Biden refused to support the strike.





Biden telling a Michigan auto union worker 10 March 2020 at a Fiat Chrysler assembly plant: “You’re full of shit. No, shush, shush. Don’t tell me that, pal, or I’m going to go outside with you man. I’m not working for you. Gimme a break man. Don’t be such a horse’s ass.”

On 22 December 2022, Joe Biden signed a bill to block the railroad unions from striking and denying RR workers sick days.

Biden has a history of speaking before labor unions, but only when he wants something from them.

See: `.prproj`  — file extension

See: `.psb`  — file extension

See: `.psd`  — file extension

See: `.psdx` — file extension

See: `.pst` — file extension

See: `.ptx` — file extension

public

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

keyword: SQL reserved word (ANSI, Oracle)

See: `@public` — OBJECTIVE C

public key cryptography (PKC)

noun “Encryption system that uses a public-private key pair for encryption and/or digital signature.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government]

public place

noun “Any property that is open to the general public” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Puffin OS

operating system

Proprietary OS by CloudMosa.

pure

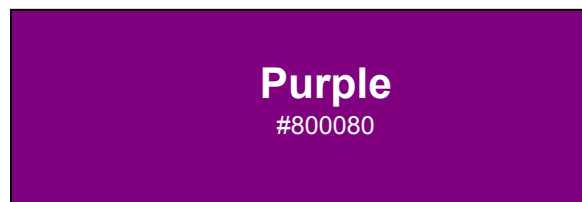
keyword: VHDL reserved key word

purge

keyword: COBOL reserved word (z/OS)

Purple

keyword: HTML color name



putc

function: C stdio.h library function: stands for PUT Character

putchar

function: C stdio.h library function: stands for PUT CHARACTER

Vladimir Putin

27 July 2023: “PUTIN: ‘We will be ready to provide Burkina Faso, Zimbabwe, Mali, Somalia, CAR and Eritrea with 25-50,000 tons of grain free of charge, we will also provide free delivery... Russia makes a significant contribution to global food security... those who say it is not so are telling lies.’ ” —[upholdreality](#)

29 July 2023: “Putin: “Our Western partners forgot what they did in Iraq, destroying the country’s statehood and ultimately eliminating Saddam Hussein. They forgot the way they acted in Libya, without any resolution from the UN Security Council. They forgot they ruined the situation in Sudan. They forgot that they invaded Syria. They could not care less about the UN Charter. They think of international law only when they believe they can use these tools against someone. In this case, against Russia. But they will fail; this approach is too primitive.” ” —[sarah](#)

PWB/UNIX

abbreviation

operating system

Proprietary OS by Bell Labs.

A version of UNIX Time-Sharing System v6. —[Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v6

Pyramid of the Feathered Serpent



Equinox at the Pyramid of the Feathered Serpent

Image Credit & Copyright: Robert Fedez

19 March 2023: **Explanation:** To see the feathered serpent descend the Mayan pyramid requires exquisite timing. You must visit El Castillo -- in Mexico's Yucatán Peninsula -- near an equinox. Then, during the late afternoon if the sky is clear, the pyramid's own shadows create triangles that merge into the famous illusion of a slithering viper. Also known as the Temple of Kukulcan, the impressive step-pyramid stands 30 meters tall and 55 meters wide at the base. Built up as a series of square terraces by the pre-Columbian civilization between the 9th and 12th century, the structure can be used as a calendar and is noted for astronomical alignments. The featured composite image was captured in 2019 with Jupiter and Saturn straddling the diagonal central band of our Milky Way galaxy.” — [Astronomy Picture of the Day](#)

See: .pzl 🏰 — file extension

A hand-drawn illustration of the capital letter 'Q' and the lowercase letter 'q'. The 'Q' is a simple circle with a small tail at the bottom right. The 'q' is a circle with a small tail at the bottom right, and a vertical line extending downwards from the bottom of the circle.

Q

ASCII: 51 hex

UNICODE: LATIN CAPITAL LETTER Q

q

ASCII: 71 hex

UNICODE: LATIN SMALL LETTER Q

quackery

“Science-of-the-Gaps Fallacy:

When a phrase akin to “science doesn’t have all of the answers” is used to justify unsupported claims.

It’s often used to promote pseudoscience and alternative approaches to health that are clearly/scientifically baseless.” —[Dr. Jonathan N. Stea](#)

“Problems with pharma don’t mean that quackery works Problems in aircraft design to not mean that magic carpets can actually fly.” —Dr. Ben Goldacre

quarantine

The word quarantine comes from the Italian *quaranta giorni*, meaning forty days, because in the 14th century, during the plague, passengers were forbidden to come

ashore for 40 days after a ship arrived in port.

queue

keyword: COBOL reserved word (z/OS)

quote

keyword: COBOL reserved word (z/OS)

quotes

keyword: COBOL reserved word (z/OS)

qsort

function: C library function: stands for Quick SORT

R r

R

ASCII: 52 hex

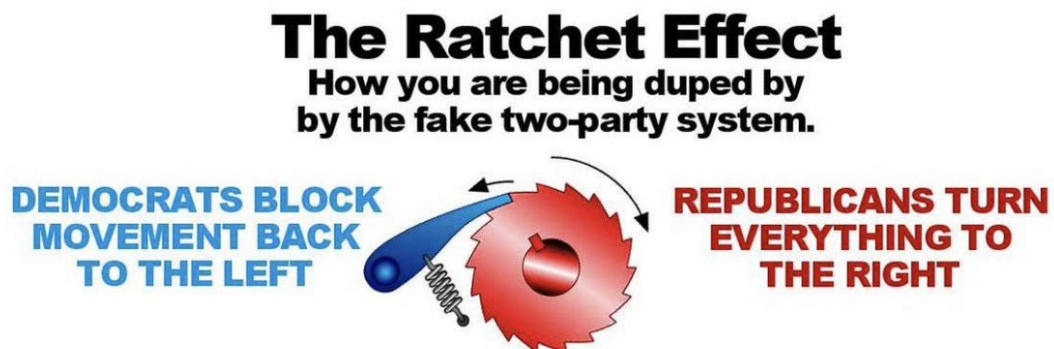
UNICODE: LATIN CAPITAL LETTER R

r

ASCII: 72 hex

UNICODE: LATIN SMALL LETTER R

ratchet effect



radicalized


19 June 2022: “How was the left radicalized?”

Bro, I'm not radicalized. Literally all of my political views are just extrapolations of the most basic premises of human decency. Universal healthcare isn't "radical." I figured that one out when I was, like, 8 years old. Get a grip.” —[Grosdoriane](#)

Radium Girls

From 1917 to 1926, the U.S. Radium Corporation hired women (called the Radium Girls in the national press) to hand paint watch dials and hands with a self-luminous paint. This resulted in radiation poisoning. The Radium Dial Company (different owners) did the same thing starting in 1922.

This led to the first occupational disease labor law, something the Libertarians view as unnecessary regulation that steals from corporations and their billionaire owners.

See: .raf  — file extension

rail road workers

14 Augst 2023: “Democrats are deceivers. They lied about supporting the working class then cowardly voted to support the billionaire railway owners. Dems didn't have the fortitude to stand with rail workers. It takes strength and truth to fight against those who plot against working Americans.” —[Professor Anthony Zenkus](#)

raise

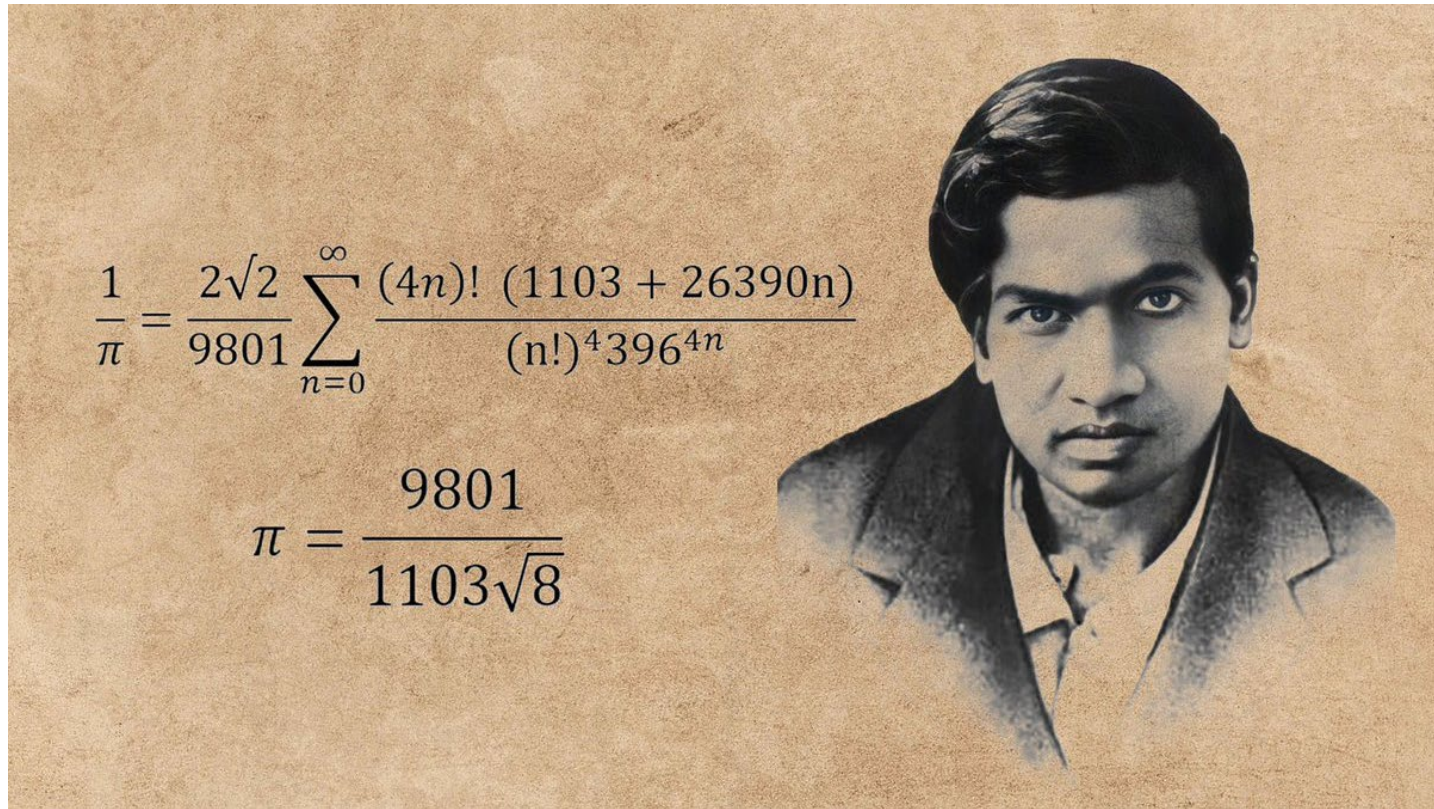
keyword: Ada reserved key word

Srinivasa Ramanujan

29 July 2023: “Mathematician **Srinivasa Ramanujan** discovered nearly 4,000 theorems and equations, unique and groundbreaking.

Some of his results were so **advanced** that they were not proven until **decades after his death**. He also anticipated some concepts that later became part of modern

mathematics and physics, such as fractals, modular forms, string theory, and black hole cosmology.” —[Physics In History](#)



rand

function: C library function: stands for RANDom number

Ayn Rand

“Capitalism and altruism are incompatible; they are philosophical opposites; they cannot co-exist in the same man or in the same society.” —Any Rand

random

keyword: COBOL reserved word (z/OS)

range

keyword: Ada reserved key word

keyword: VHDL reserved key word

rape

21 September 2023: “In Saudi Arabia, Iran, Iraq, Afghanistan, Yeman, Syria, Oman, and The UAE rape victims are arrested for Fornication. In Saudi Arabia, Afghanistan, and Iran the punishment execution in most other countries it’s a minimum of 6 years.” —[Mmmaclokleapyear](#)

rapid unscheduled disassembly

Elon Musk’s SpaceX Starship exploded after launch attempt, 20 April 2023, 8:33 a.m. CT from Bosa Chica, Texas.



SpaceX claimed it didn’t explode, but rather “As if the flight test was not exciting enough, [SpaceX] Starship experienced a **rapid unscheduled disassembly** before [the Super Heavy] stage separation.”

The vehicle was unmanned.

Starship on track to launch in ~37 mins — [Elon Musk](#) at 5:50 am 20 Apr 2023

“Everything after clearing the tower was icing on the cake.”

Video Transcript

- 5, 4, 3, 2--

[CROWD CHEERING]

[APPLAUSE]

- Zero post [INAUDIBLE] operations.

[APPLAUSE AND CHEERS]

Booster outdoor chamber pressures nominal.

- [INAUDIBLE] 33 seconds under the test point of the inaugural Starship vehicle. Tower cleared. [INAUDIBLE] over. The [INAUDIBLE] reports first stage engines nominal. What a sight from the ground. Cameras--

[RADIO CHATTER]

We're flying at twice the thrust of the Saturn V [INAUDIBLE].

[CROWD CHEERING]

[RADIO CHATTER]

We're throttled down and throttled back up. Going through the period of maximum aerodynamic pressure.

[INTERPOSING VOICES]

[APPLAUSE]

As the velocity increases, the depth of the atmosphere is decreasing.

[RADIO CHATTER]

Lessening stress on the vehicle. The [INAUDIBLE] out [INAUDIBLE] now.

[CHEERS AND APPLAUSE]

Continuing to watch the first stage as we head downrange.

[APPLAUSE]

100 seconds into flight. Our next major activity is going to be shutdown of the first stage. Houston tracking station now acquiring the vehicle. We're shut down. We will get separation of Starship and Super Heavy and ignition of the Starship engines. When Starship separates, we light up six engines in a staggered sequence. And if all goes well, those six engines will burn for almost 6 and 1/2 minutes. Onboard view from Starship.

[CHEERING]

And there's views of the Raptor engines on the second stage as we prepare for stage separation. Now after stage separation, the first stage will flip and begin a boost back maneuver for landing in the Gulf.

Continuing to fly 2 minutes, 40 seconds. Let's get ready for main engine cutoff.

Booster engine cutoff.

- Beginning to flip for stage separation.

[CHATTER]

- As of right now, we are awaiting stage separation where Starship should separate from the Super Heavy booster.

- Yeah, Kate, right now it looks like we saw the start of the flip. But obviously, we're seeing from the ground cameras the entire Starship stack continuing to rotate. We should have had separation by now. Obviously, this is-- does not appear to be a nominal situation.

- Yeah, it does appear to be spinning. But I do want to remind everyone that everything after clearing the tower was icing on the cake.

[CROWD REACTS]

[APPLAUSE]

- Oh. There-- [LAUGHS] and there, as you saw, as we promised, an exciting end to the Starship inaugural integrated test flight.

“We were just happy to get it off the launch pad successfully,” wasn’t the originally stated goal, but I suppose when everything goes to shit, it’s nice to be able to gaslight people into accepting every failure as a purposeful genius move. —[Johnny Akzam](#)

We’re pretty good with synonyms, but “rapid unscheduled disassembly” is a new

one, even for us. —[Dictionary.com](#)

The Federal Aviation Administration (FAA) stated “The FAA will oversee the mishap investigation of the Starship / Super Heavy test mission. A return to flight of the Starship / Super Heavy vehicle is based on the FAA determining that any system, process, or procedure related to the mishap does not affect public safety” and added this is “standard practice for all mishap investigations.”

SpaceX’s statement “At 8:33 a.m. CT, Starship successfully lifted off from the orbital launch pad for the first time. The vehicle cleared the pad and beach as Starship climbed to an apogee of ~39 km over the Gulf of Mexico & the highest of any Starship to-date. The vehicle experienced multiple engines out during the flight test, lost altitude, and began to tumble. The flight termination system was commanded on both the booster and ship. As is standard procedure, the pad and surrounding area was cleared well in advance of the test, and we expect the road and beach near the pad to remain closed until tomorrow.”

That Elon Musk rocket succeeded only in raining down rocket fuel on the Gulf Coast and yet the news stories still frame it as a partial success or a successful failure. So stupid —[Brett Chapman](#)

See: **.rar** — file extension

See: **.raw** — file extension

raw

keyword: SQL reserved word (Oracle)

rd

keyword: COBOL reserved word (z/OS)

RDOS

abbreviation

operating system

Proprietary OS by Data General.

real-time Disk Operating System, with variants: RTOS and DOS. — [Wikipedia: List of operating systems](#)

read

keyword: COBOL reserved word (z/OS)

ready

keyword: COBOL reserved word (z/OS)

Ronald Reagan

In 1984 Ronald reagan lowered the top income tax rate from 70% to 28%. Then he imposed the first ever income tax on Social Security to pay for the tax cut for the wealthy.

real

keyword: SQL reserved word (z/OS)

realloc

function: C library function: stands for memory REALLOCation

RebeccaPurple

keyword: HTML color name



RebeccaPurple is named for Eric Meyer's daughter, who had died of brain cancer shortly before the standard was finalized.

See: .rec — file extension

receive

keyword: COBOL reserved word (z/OS)

record

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

recording

keyword: COBOL reserved word (z/OS)

sound recording

18 July 2023: “Pro tip: There are many factors that go into what makes a good recording—even with excellent gear, you’ve still got room acoustics, microphone technique, and actual talent to worry about (that last one being the most overlooked).”

—[Ed the Soundman](#)

from me: have a backup thing to work on in the studio.

Sometimes recording will identify a more fundamental problem you missed in rehearsals and performances.

Don't waste expensive studio time fixing those problems. You can fix these problems at your next rehearsal.

Switch to your back up plan while you have everyone together.

recording studios

20 March 2023: “Did some tech work in a big studio recently, had some ginormous soffit-mounted ATCs. They said they only ever used them to impress clients & mixed solely on their 3-way mid-field Focals (w/no decouplers). Bigger ain't always better & sound is a lot more important than volume.” —[C MONEY BURNS](#)

records

keyword: COBOL reserved word (z/OS)

recursive

keyword: COBOL reserved word (z/OS)

Red

keyword: HTML color name



RED

adjective “Information or messages that contain sensitive or classified information that is not encrypted. See also BLACK.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; CNSSI No. 4005 (COMSEC)]

See: **BLACK**

Red Cross

15 August 2023: “The Red Cross raised \$500 million for Haiti earthquake relief in 2010, spent 25% on internal administrative costs, built about 6 houses for Haitians and refuses to say what it did with the rest of the money. And Michelle Obama helped lead their fundraising drive.” —[Max Blumenthal](#)

redefines

keyword: COBOL reserved word (z/OS)

redo

keyword: Ruby reserved word

reel

keyword: COBOL reserved word (z/OS)

Hubert Reeves

“Man is the most insane species. He worships an invisible God and destroys a

visible Nature. Unaware that this Nature he's destroying is this God he's worshipping.”
—Hubert Reeves

See: .ref — file extension

reference

keyword: COBOL reserved word (z/OS)

references

keyword: COBOL reserved word (z/OS)

reference tracks

28 November 2023: “Pro tip: Using reference tracks isn’t about getting your music to sound like their music—it’s about getting a general perspective of frequency balance, width, and dynamics from an appropriate baseline.” —[Eduard](#)

See: refined flour

regalia

26 May 2023: “So the Oklahoma Legislature overrode Governor Stitt’s veto of a bill they passed to protect the right of Native American students to wear regalia to graduation. Just think about that: that it needed a law in the first place speaks volumes about how this country this is to Natives.” —[Brett Chapman](#)

26 May 2023: “It doesn’t hurt anyone and few things matter less gravely in life than a high school graduation ceremony where everyone wears some type of European costume. Yet the fascist types still want to dictate to Native Americans about how we add real cultural significance to their costume.” —[Brett Chapman](#)

register

keyword: C keyword: storage class

keyword: Objective-C reserved word

keyword: VHDL reserved key word

reject

keyword: VHDL reserved key word

See: .rel — file extension

relative

keyword: COBOL reserved word (z/OS)

fallacies of relevance

I. FALLACIES OF RELEVANCE: These fallacies appeal to evidence or examples irrelevant to the argument at hand.

—from Dr. L. Kip Wheeler's (Carson-Newman University) *Logical Fallacies Handlist*

See: logical fallacies

See: appeal to force

See: genetic fallacy

release

keyword: COBOL reserved word (z/OS)

religio

According to Cicero, religio is “the proper performance of rites in veneration of the gods.”

reload

keyword: COBOL reserved word (z/OS)

rem

keyword: Ada reserved key word

keyword: VHDL reserved key word

remainder

keyword: COBOL reserved word (z/OS)

removal

keyword: COBOL reserved word (z/OS)

rename

keyword: SQL reserved word (Oracle)

renames

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

reparations

“If you think you shouldn’t pay for the sins of your ancestors, you shouldn’t reap the benefits from their bloodshed either.” — [Rome Bethea](#)

replace

keyword: COBOL reserved word (z/OS)

replacing

keyword: COBOL reserved word (z/OS)

report

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

reporting

COBOL reserved word (z/OS)

keyword:

reports

keyword: COBOL reserved word (z/OS)

repository

keyword: COBOL reserved word (z/OS)

republic

“REPUBLIC — Government by representatives of an established electorate who rule in behalf of the electors.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

Republicans

Republicans will always choose to side with fascists over socialists because fascism doesn't threaten capital. [saying]

requeue

keyword: Ada reserved key word

required

keyword: PHP reserved word

required_once

keyword: PHP reserved word

rerun

keyword: COBOL reserved word (z/OS)

rescue

keyword: Ruby reserved word

reserve

keyword: COBOL reserved word (z/OS)

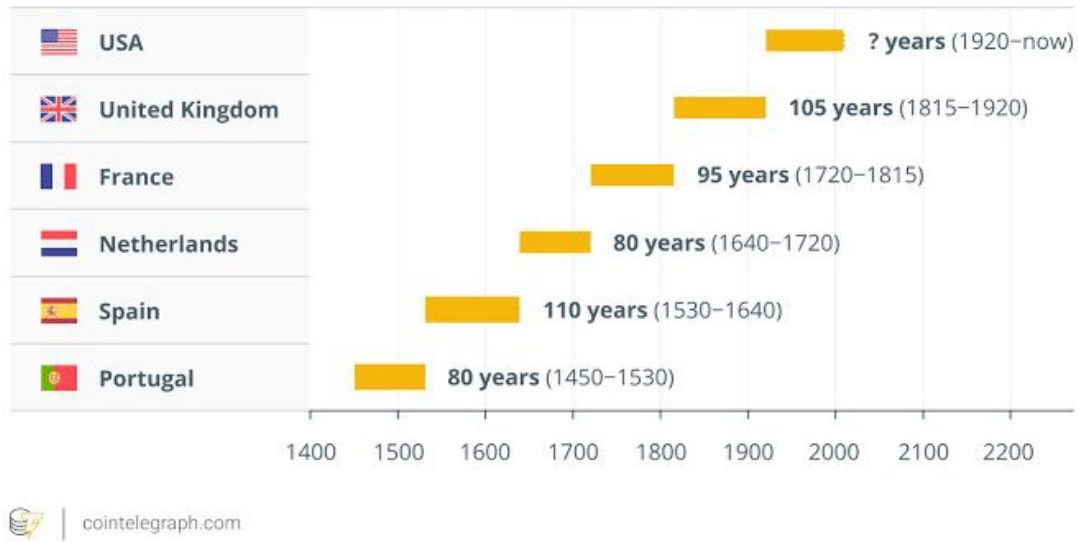
reserve currency

27 April 2023: “Nothing lasts forever. Before the U.S. \$dollar, there were five global reserve currencies in the previous 500 years — those of Portugal, Spain, Netherlands, France and the UK.

However, in the coming multipolar world, there won't be any one dominant currency. In fact, the whole concept of a reserve currency will fade into obscurity. It's a relic of colonialism and imperialism.

China's yuan, dollar, Euro, and perhaps BRICS currency - if they can do it right - will be the top TRADE currencies.” — [S.L. Kanthan](#)

Global reserve currencies since 1450



reset

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows method

See: resistance training

resource

keyword: SQL reserved word (Oracle)

restrict

keyword: Objective-C reserved word

retain

keyword: Objective-C word

retirement age

25 August 2023: “Choina has the world’s youngest retirement age, according to data from the Organization for Economic Co-operation and Development (OECD). For that distinction, it can partly thank a government policy dating back to the 1950s that lets women retire at 50 and men at 60.” —[Antifa HR Director](#)

retry

keyword: Ruby reserved word

return

keyword: Ada reserved key word

keyword: C keyword: statement

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: Ruby reserved word

keyword: VHDL reserved key word

return-code

keyword: COBOL reserved word (z/OS)

returning

keyword: COBOL reserved word (z/OS)

reverb

27 August 2023: “reverb cheat sheet” — [Solar Heavy](#)



19 November 2023: “reverb cheat sheet” — [Solar Heavy](#)

ValhallaVintageVerb Version 2.0.2
www.valhallaadsp.com

MIX 100.0 %
PREDELAY 20.00 ms

DECAY 4.00 s

DAMPING
HighFreq 6000 Hz
HighShelf -24.00 dB
BassFreq 700 Hz
BassMult 1.50 X

SHAPE
Size 100.0 %
Attack 50.0 %

DIFF
Early 100.0 %
Late 100.0 %

MOD
Rate 2.53 Hz
Depth 38.0 %

EQ
HighCut 8000 Hz
LowCut 10 Hz

COSMIC ACADEMY

— 6 TIPS TO CHOOSE THE —

RIGHT REVERB

1. ARE YOU TRYING TO SOUND NATURAL?
2. WHAT IS THE TEMPO OF YOUR SONG?
3. WHAT EMOTION ARE YOU GOING FOR?
4. HOW FULL/EMPTY IS YOUR MIX?
5. WHAT IS THE RHYTHM OF YOUR TRACK?
6. ARE YOU MAINTAINING SEPARATION BETWEEN YOUR SOUNDS?

24 November 2023: “reverb cheat sheet” — [Solar Heavy](#)

SPICE UP YOUR REVERB!

TRY THIS TO EASILY **CREATE A VARIETY** IN THE MIX!

ValhallaVintageVerb Version 2.0.2
www.valhallaadsp.com

MIX 100.0 %
PREDELAY 20.00 ms
DECAY 4.00 s

DAMPING
HighFreq 6000 Hz HighShelf -24.00 dB
BassFreq 700 Hz BassMult 1.50 X

SHAPE
Size 100.0 %
Attack 50.0 %

DIFF
Early 100.0 %
Late 100.0 %

MOD
Rate 2.53 Hz
Depth 38.0 %

EQ
HighCut 8000 Hz
LowCut 10 Hz

MODE: Concert Hall **COLOR:** 1980s **PRESETS:** Default

- + A great way to add a unique texture to your mix is by **adding Fx** to the reverb.
- + Try adding **saturation, distortion** or **flanger** before or after the reverb.

30 November 2023: “Short reverb is under 1 second, probably 300-600 ms
Usually it’s room. Giving some nice space to your sound.

Long reverbs are more than 1 second, having longer tails and atmospheric feel.”

—[Nathaniel W.](#)

23 December 2023: “Getting cleaner reverb

In absolute most cases, cutting some of the low mids from your reverb signal is a good idea

Usually around 200-400 hz.” —[Nathaniel W.](#)

23 December 2023: “I usually just cut below 300hz on my reverbs, been getting cleaner mix since then” —[Sunda\(de\)producer](#)

23 December 2023: “Relab LX480

Amazing sounding emulation of Lexicon 480L hardware reverb. Arguably the best one.” —[Nathaniel W.](#)

23 December 2023: “I purchased the lite version of this from Relab a couple years ago and have used it alot! The vocal plate is probably my go-to reverb. I’m not sure if paying a couple hundred for the full version would be worth it though. Not sure what I’m missing.” —[asCoffeeMattdf](#)

23 December 2023: “yes yes yes yes yes
i use this on quite literally every fucking mix for the last two years. you can do soooooooooo much with it
they frequently have sales too on relab for the essentials for a really really good price!” —[blxody](#)

27 December 2023: “Pro reverb tip
You can try using a very long reverb along with your main ones
Very very quiet, like -20 db or even quieter. And automating to some words, possibly the last words in lines.
Don’t forget to clean the lows/low mids on that reverb too.
Of course this won’t fit all the songs but it’s a nice trick in the arsenal to make your mixes a bit more interesting.
I used even Valhalla Shimmer for that.” —[Nathaniel W.](#)



27 December 2023: “It’s helpful to side chain the reverb to the source audio, too, so you just get the verb tails. I do that on vocals and guitars.” —[MAJIKstudios](#)

reverse

keyword: Ada reserved key word

reversed

keyword: COBOL reserved word (z/OS)

revoke

keyword: SQL reserved word (ANSI, Oracle)

revolution

“You can jail a revolutionary, but you can’t jail the revolution.” —Fred Hampton

“The Revolution introduced me to art, and in turn, art introduced me to the Revolution!” —Albert Einstein

“When one makes a Revoluton, one cannot mark time; one must always go forward - or go back. He who now talks about the ‘freedom of the press’ goes backward, and halts our headlong course towards Socialism.” —Vladimir Lenin

The hopeless don’t revolt, because revolution is an act of hope.—Peter Kropotkin

Those who make peaceful revolution impossible, make violent revolution inevitable.—John F Kennedy

rewind

keyword: COBOL reserved word (z/OS)

rewrite

keyword: COBOL reserved word (z/OS)

rf

keyword: COBOL reserved word (z/OS)

rh

keyword: COBOL reserved word (z/OS)

Rhapsody

operating system

Proprietary OS by Apple for the Apple Macintosh.

Apple Macintosh

Randy Rhoads

“There’s no reason for a guitarist to have a big ego. You should love the instrument more than wanting to be a rock star.” —Randy Rhoads

See: rice

See: brown rice

Rice Krispies

Rice Krispies is banned in the European Union and Japan because they include Butylated hydroxytoluene (BHT), an artificial flavor enhancer that is carcinogenic.

Keith Richard’s guitar

13 January 2024: “Today’s random #guitar pic is Keith Richards’ 1959 Gibson Les Paul Standard. He 1st used it for the Stones 2nd U.S. tour & on the Ed Sullivan show. Purchased 2nd hand in 1964 its has been used by Eric Clapton, Jimmy Page & then

sold to ex-Stones guitarist Mick Taylor” —[Brian L](#)



Rich Men North of Richmond

26 August 2023: “Rich Men North of Richmond has a great melody and delivery. It’s a solid song.

Much of the lyrics are strong too.

But the author seems to think welfare is the cause of poverty. That’s factually not true and it’s sad to see poor people fooled by this fallacy.

I was born poor.

Welfare and social programs made it possible for me to do everything I've done.

And it’s not just me.

Countries with strong social programs have less poverty and more equality.

Taxes used to pay for social programs are the best structural solution to encourage and allow for social mobility.

It’s the statistically best way for people that are born poor to have a meaningful chance to prosper.

Nobody is self made. Societies can choose who they lift up and who they hold down.” —[Halli](#)

rich people

“How come every right wing solution to poverty, hunger, health, and

unemployment involves giving rich people more money?” —Jeremy Corbyn

rifle tie

Teppo Shibari (Rifle Tie): A tie where one arm is stretched upward and the other one downward, reminiscent of carrying a rifle on one's back.

See also: shibari

right

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

rights

The United States kidnaps and imprisons people in Guantanamo Bay to deny them basic legal rights, which are guaranteed to every person inside the US. —[William Murphy](#)

rindex

function: C string.h library function: stands for Reverse INDEX string

Rio Grande

14 August 2023: “Gov. Abbott is destroying the Rio Grande for a fearmongering photo-op.

Miles of deadly razor-wire have been deployed to ensnare & impale border crossers. Bobcats, bear, mule deer & other wildlife will also be cut off from their main source of water.” —[Laiken Jordahl](#) [tweet includes video]

RISC iX

abbreviation

operating system

Proprietary OS by Acorn Computers

RISC OS

abbreviation

operating system

Proprietary OS by Acorn Computers

risk assessment

noun “The process of identifying, estimating, and prioritizing risks to organizational operations (including mission, functions, image, reputation), organizational assets, individuals, other organizations, and the Nation, resulting from the operation of an information system. Part of risk management, incorporates threat and vulnerability analyses, and considers mitigations provided by security controls planned or in place. Synonymous with risk analysis. ” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-39]

risk assessor

noun “The individual, group, or organization responsible for conducting a risk assessment.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-30 Rev 1]

Ritz crackers

Ritz crackers are banned in Austria, Denmark, Hungary, Iceland, Norway, and Switzerland for containing high levels of sodium-hydrogenated cottonseed oil, a trans fat that causes cardiovascular disease.

See: `.rmvb` — file extension

Navy Joan Roberts

President Joe Biden shows the “compassion” that the Democrats routinely brag about by refusing to meet with or recognize his granddaughter, Navy Joan Roberts, the two year old (in 2023) daughter of his son Hunter Biden and a stripper, Lunden Roberts.

robot dog

The Los Angeles City Council voted 8-4 on Tuesday, 23 May 2023, to accept the donation of a a \$280,000 Boston Dynamics robot dog for use by the Los Angeles Police Department, despite overwhelming protest by the community since the matter was brought up at a 7 march 2023 City Council meeting.



my comment: There are a bunch of photos of the robot dog, but this one particularly caught my eye. I personally find this KNBC-TV Los Angeles photo to be disturbing. I can guess the intent of KNBC-TV in choosing this particular photo. The lighting seems very corporate, as if the photographer is trying make the robot dog seem mundane and ordinary. The photographer chose an angle from above, which normally causes the subject of the photo to be weakened and diminished. It is clear that both the

photographer and KNBC-TV are trying to diminish the shocking horror inherent in the robot itself.

rodent

“Rodents include rats, mice, and other small gnawing mammals. They have a single pair of continuously growing incisors (teeth) in each of the upper and lower jaws that must be kept short by gnawing.” —[Groups of Mammals](#)

Will Rogers

“The short memory of American voters is what keeps our politicians in office.” — Will Rogers

“The taxpayers are sending congressmen on expensive trips abroad. It might be worth it, except they keep coming back.” —Will Rogers

“I don’t care how little your country is, you got a right to run it like you want to. When the big nations quit meddling then the world will have peace.” —Will Rogers

rol

keyword: VHDL reserved key word

roller derby

My grandfather on my father’s side loved to watch roller derby on the television after work.

Roma

6 December 2023: “Spotted this glorious wee stela yesterday showing the ‘servant in the Place of Truth’ (i.e. a Valley of the Kings workman) called Roma, adoring the

god Thoth as a baboon on a plinth, in the top register. The style is post-Amarna, just after the royal cemetery was restored...” —[Dr. Campbell Price](#)



6 December 2023: “... and here’s just such a baboon on a plinth, for many years outside in the Museum garden - from Tanis and inscribed with the name of the 21st Dynasty ruler Psusennes but perhaps originally carved much closer in time to Roma.” —[Dr. Campbell Price](#)



Franklin Roosevelt

In 1944, President FDR proposed an Economic Bill of Rights:
Second Bill of Rights
Every American has the right to:

1. a job
2. an adequate wage and decent living
- 3 a decent home
- 4 medical care
5. ewconomic protection during sickness, accident, old age, or unemployment
6. a good education

Teddy Roosevelt

“Presidents are selected, not elected. Behind the ostensible government sits enthroned an invisible government owing no allegiance and acknowledging no responsibility to the people.” —Theodore Roosevelt

See: root vegetables

rör

keyword: VHDL reserved key word

RosyBrown

keyword: HTML color name



Mayer Amschel Rothschild

“Give me control of a nation’s money supply, and I care not who makes its own laws.” —Mayer Amschel Rothschild

round

keyword: SQL reserved word (z/OS)

rounded

keyword: COBOL reserved word (z/OS)

row

keyword: SQL reserved word (Oracle, z/OS)

rowid

keyword: SQL reserved word (Oracle)

rownum

keyword: SQL reserved word (Oracle)

rows

keyword: SQL reserved word (ANSI, Oracle)

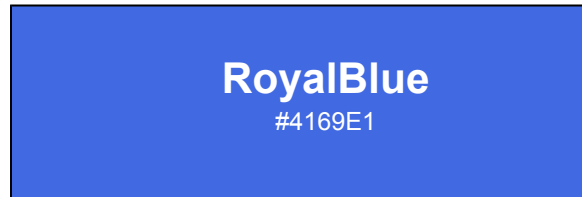
Arundhati Roy

“People spend so much time mocking Trump or waiting for him to be impeached.

And the danger with that kind of obsession with a single person is that you don't see the system that produced him.” —Arundhati Roy

RoyalBlue

keyword: HTML color name



rpad

keyword: SQL reserved word (z/OS)

See: **.rpm** — file extension

RSTS/E

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

multi-user time-sharing OS for PDP-11s — [Wikipedia: List of operating systems](#)

RSX-11

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

multiuser, multitasking OS for PDP-11s — [Wikipedia: List of operating systems](#)

RT-11

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

single user OS for PDP-11 — [Wikipedia: List of operating systems](#)

Luis Rubiales

26 August 2023: “The Spanish football federation announces that, instead of removing president Luis Rubiales, they will take legal action against player Jenni Hermoso as they claim she ‘lied’ about non-consensual kiss.

The federation also says players have an “obligation” to play for the national team after 81 female players said they would not play until Rubiales was removed, in solidarity with Jenni Hermoso.

[NOTE: there is video footage of the incident.]” — [Pop Base](#)

Rubic's Cube

Max Park, a 21-year-old speedcuber, broke the record for the fastest time to solve a 3x3x3 rotating Rubik's cube. Park solved the cube in 3.13 seconds to set the record on Sunday, 11 June, at California's Pride in Long Beach 2023 event.

“21-year-old Max Park has set a new world record for solving a 3x3x3 Rubik's Cube in just 3.13 seconds.” — [Massimo](#) [includes video]

Mark Ruffalo

17 July 2023: “When your home burns, floods, or is destroyed in an extreme climate weather event, when someone in your family dies from heat waves, or when crops fail and people starve—come for these three people: Wael Sawan (Shell CEO), Darren Woods (Exxon CEO), and Patrick Pouyanne (TotalEnergies CEO). They knew what was coming and did it to you anyway. Sue them, shame them, heckle them, despise them. These are choices. They are to blame, not society.

“Corporations are people, my friend.” -Mitt Romney” —[Mark Ruffalo](#)

run

keyword: COBOL reserved word (z/OS)

Mount Rushmore

“The grandfathers were natural rock formations that were said to show that the Creator gave this land to us because the grandfathers looked Native. So the colonizers defaced it and made Mount Rushmore.” —[Hyapatia Lee](#)

Bertrand Russell

“Our great democracies still tend to think that a stupid man is more likely to be honest than a clever man, and our politicians take advantage of this prejudice by pretending to be even more stupid than nature made them.” —*New Hopes for a Changing World*, Bertrand Russell

“I do not pretend to be able to prove that there is no God. I equally cannot prove that Satan is a fiction. The Christian god may exist; so may the gods of Olympus, or of ancient Egypt, or of Babylon. But no one of these hypotheses is more probable than any other: they lie outside the region of even probable knowledge, and therefore there is no reason to consider any of them.” —*Why I Am Not a Christian and Other Essays on Religion and Related Subjects*, Bertrand Russell

Russia

27 July 2023: “PUTIN: ‘We will be ready to provide Burkina Faso, Zimbabwe, Mali, Somalia, CAR and Eritrea with 25-50,000 tons of grain free of charge, we will also provide free delivery... Russia makes a significant contribution to global food security... those who say it is not so are telling lies.’ ” —[upholdreality](#)

23 September 2023: “Russia has imposed an indefinite ban on the export of diesel and gasoline to all countries except Armenia, Belarus, Kazakhstan and Kyrgyzstan.

Oil prices per barrel are skyrocketing.

Putin is playing the West again. Russia officially enters the trade war. With this move, prices will become too high and there will be a huge problem in the economy of the west.

The moment is not random, but was chosen exactly before the beginning of winter. Huge pressure and costs will arise in companies, especially in Europe. Like the previous winter, in which \$600 billion was lost due to expensive energy and mostly ended up in Russia's account, this year will be even worse.

Europe will realize what a mistake it made by becoming an absolute vassal of Washington.” —[Megatron](#)

19 October 2023: “Russia on Thursday sent 27 tonnes of humanitarian aid for civilians in the Gaza Strip to be transported from Egypt, Moscow's emergency situations ministry said.

“A special plane has taken off from the airport at Ramenskoye near Moscow for El-Arish in Egypt. The Russian humanitarian aid will be handed over to the Egyptian Red Crescent to be sent to the Gaza Strip,” deputy minister Ilya Denisov said in a statement.

Denisov said the aid comprised “wheat, sugar, rice (and) pasta”.” —[NDTV World](#)

19 October 2023: “Only in the West can you make people believe that a group who went into another country, took the land, forced 2 million people to live behind a wall, with no rights and makes them suffer through every kind of Human Rights abuse you can think of, are the victims”.” —[Black in the Empire](#)

1 December 2023: “Russian President Vladimir Putin on Friday ordered the country's military to increase the number of troops by nearly 170,000 to a total of 1.32 million, as Moscow's military action in Ukraine continues into its 22nd month.

Putin's decree was released by the Kremlin on Friday and took force immediately. It brings the overall number of Russian military personnel to about 2.2 million, including 1.32 million troops.

It is the second such expansion of the army since 2018. The previous boost by 137,000 troops, ordered by Putin in August 2022, put the military's numbers at about 2 million personnel and about 1.15 million troops.

The Defense Ministry said the order doesn't imply any “significant expansion of

conscription,” saying in a statement that the increase would happen gradually by recruiting more volunteers. The ministry cited what it called “the special military operation” in Ukraine and the expansion of NATO as the reasons for beefing up the army.” — [Associated Press](#)

See: .rw2 — file extension

S s

S

ASCII: 53 hex

UNICODE: LATIN CAPITAL LETTER S

s

ASCII: 73 hex

UNICODE: LATIN SMALL LETTER S

SaddleBrown

keyword: HTML color name



SAG-AFTRA

1 September 2023: “BREAKING: SAG-AFTRA members are about to vote on a Video Game strike authorization.

After a year of negotiation the union says the major video game companies have failed to address the needs of actors involved.

So they’re calling for a second simultaneous strike.” —[More Perfect Union](#)

Carl Sagan

“But the fact that some geniuses were laughed at does not imply that all who are laughed at are geniuses. They laughed at Columbus, they laughed at Fulton, they laughed at the Wright brothers. But they also laughed at Bozo the Clown.” —Carl Sagan

sage

an aromatic plant with grayish-green leaves that are used as a culinary herb, native to southern Europe and the Mediterranean.

Saigon Central Post Office

18 December 2023: “The Central Post Office in Saigon (Ho Chi Minh City), Vietnam, was built during the period of French control, originally erected in the 1860s using Gustave Eiffel’s design and reconstructed in its current form between 1886 and 1891 by architect Auguste Vildieu. The post office is a mix of Gothic, Renaissance, and French colonial styles with Asian decorations. On January 13, 1863, the post office opened to the public and issued its first stamp. The post office is one of the city’s oldest buildings and one of the most- famous and iconic attractions in Saigon.” —CIA World Factbook (material that expires after 30 days)



salad dressing

Most store-bought salad dressing is high in calories and inflammatory industrial oils.

You can quickly make healthier homemade salad dressing by half and half olive oil (or hemp seed oil) and vinegar with spices you select.

See: making your own salad dressing

Salmon

keyword: HTML color name

Salmon

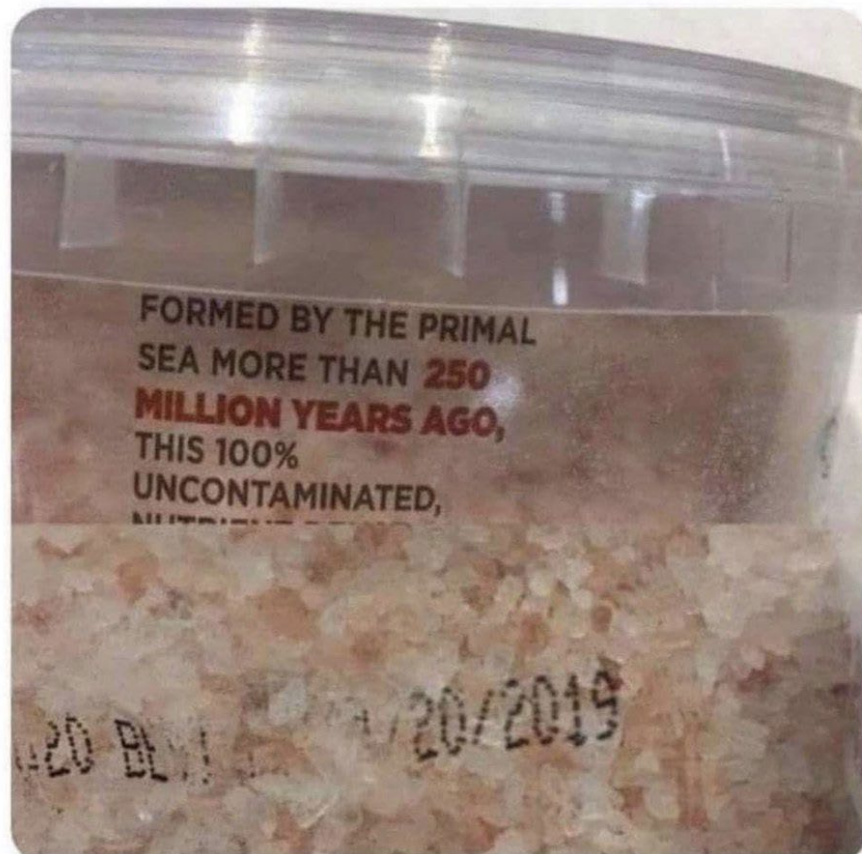
#FA8072

farmed salmon

Farmed salmon from the US is banned in Asutria and New Zealand. The farm-raised salmon is kept in crowded cages, fed processed fish feed, methyl mercury, dionins, antibiotics, and drugs not safe for humans to consume.

salt

Just my luck, 250 million year
old salt, and it expired 2 years
ago



same

keyword: COBOL reserved word (z/OS)

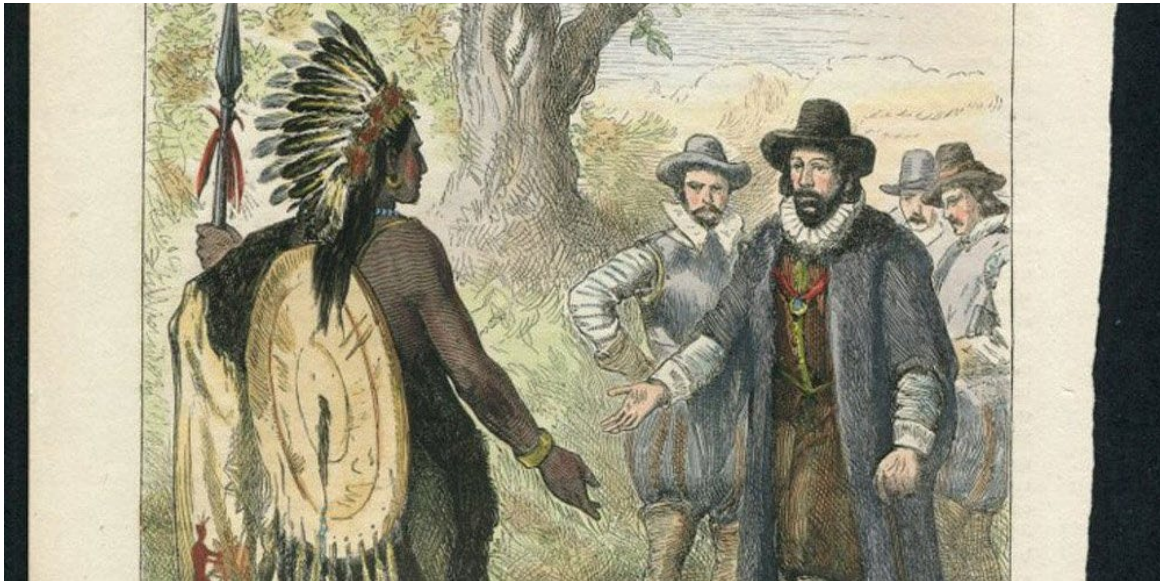
same_source

keyword: SQL reserved word (z/OS)

Samoset

“In 1621 an Abenaki man went to an encampment of foreigners and greeted them in their own language in a coolly calculated display of diplomatic acumen—“Hello, Englishmen! My name is Samoset””

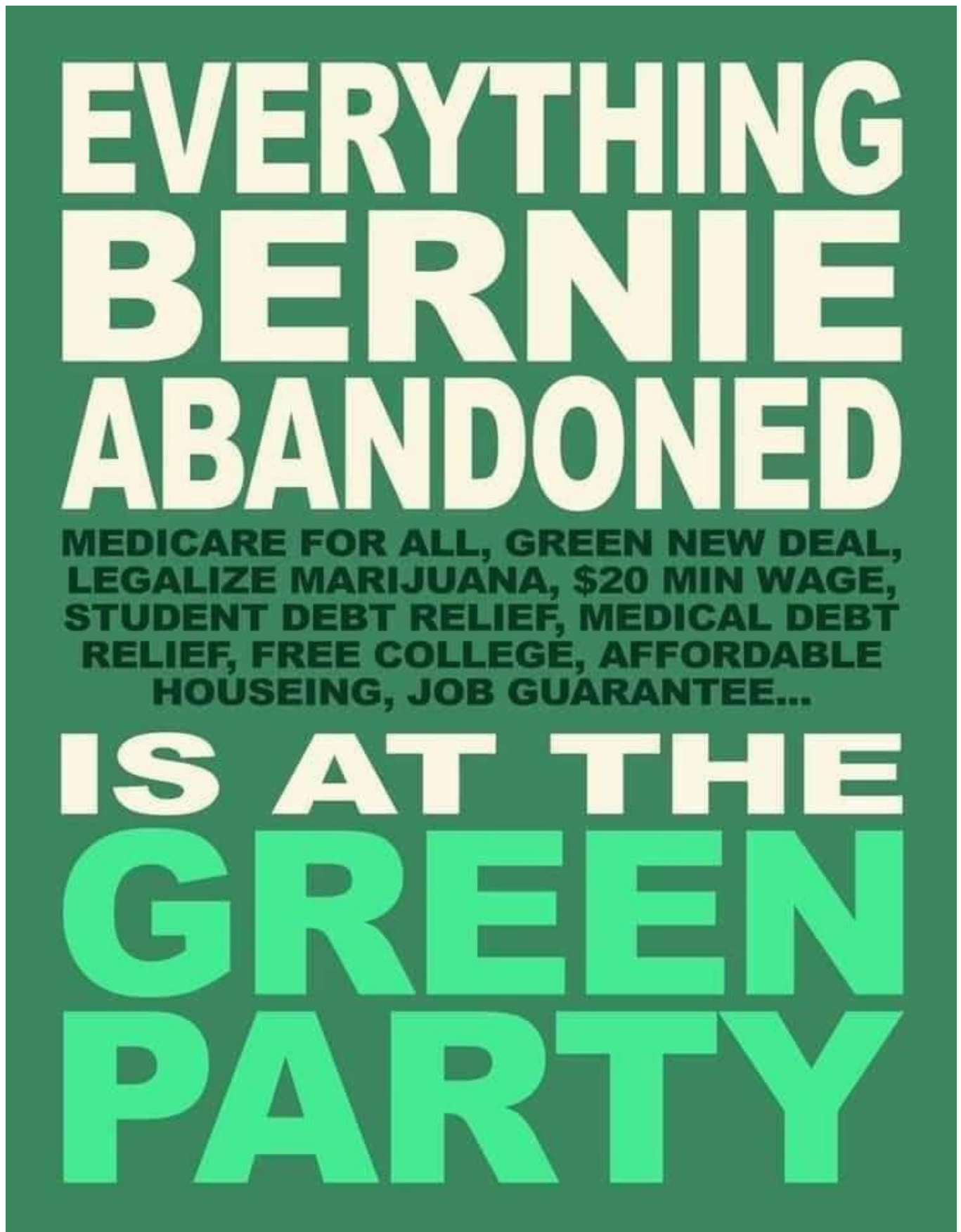
History records that he was an uncivilized savage living in the forest like all Natives” —[Brett Chapman](#)



sandbag/sandclub

noun “A bag or device filled with sand (Penal Code Section 16760)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Bernie Sanders



—[some dude, aka algún guey](#), 10 August 2023

Sanderson Farms

6 December 2023: “BREAKING: The biggest chicken and tuna companies in the U.S. have been found guilty of price fixing.

Now thousands of people are getting paid with money recovered from the corporations.

The State of Washington is using over \$40 million to send checks to 402,200 households.

Perdue, Tyson, Sanderson Farms, and JBS are colluding to raise chicken prices — up 61% over the last 15 years.” — [More Perfect Union](#)

sandwich

The word “sandwich” is named for the 4th Earl of Sandwich (1700s). There is debate whether he placed meat between two pieces of bread to continue gambling without leaving the table to eat or whether he did this to stay at his desk and continue his work. According to the gambling version, those he was gambling with asked the servants for “the same as Sandwich” and eventually shortened the request to “a sandwich”.

SandyBrown

keyword: HTML color name



San Marino

7 January 2024: “Surrounded by Italy on all sides, San Marino is the fifth-smallest country in the world (and the third-smallest in Europe, after the Vatican and Monaco). The white and blue colors on its flag represent peace and liberty respectively. The country is hilly, and its highest peak is Mount Titano, which bears three fortresses that are represented by three towers in the armorial shield at the center of San Marino’s

flag.” —CIA World Factbook (material that expires after 30 days)



sap

noun “A device used to bludgeon (Penal Code Section 16760)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

SASL-yacc

abbreviation

programming language

‘

SASL-yacc - "Yacc in SASL - An Exercise in Functional Programming", Simon Peyton-Jones, Software Prac & Exp 15:807-820 (1985). Mentions also a BCPL implementation.

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

yacc

satanic altar Iowa

15 December 2023: “It’s unbelievable how scared some theists are of a statue.

The Satanic altar at the Iowa State Capitol was beheaded yesterday by Michael Cassidy, a former U.S. Navy pilot and unsuccessful congressional candidate.”

—[Secular Coalition for America](#)

Satanta

“We grow pale and die. A long time ago this land belonged to our fathers, but when I go up to the river I see camps of soldiers on its banks. These soldiers cut down my timber, they kill my buffalo, and when I see that, my heart feels like burtsting.” — Satanta, Kiowa chief

saturation

14 January 2024: “Why you can’t hear saturation?

Did you notice that sometimes you add saturation and can’t hear ANY difference before it reaches certain amount

Well, it is not because you are deaf.

The problem is that you probably don’t have monitors/headphones with low enough harmonic distortion characteristics

The speaker ÒsaturatesÓ the sound on its own, and the saturation you add masks by speaker saturation

You will start hearing saturation after it’ll become significantly more than speakers THD

Many people come to the studio and tell “aye bro what’s wrong with your speakers, my mix sounded way cleaner”

Well it’s not the speakers, it’s the fact that you can clearly hear the actual distortion on higher class monitoring systems

The lesson here?

Don’t add saturation just because someone told you to do so

Be careful with adding saturators on top of the analog modeled plugins that already introduce fair amount of saturation.

On the picture, Amphion monitors. They use aluminum woofers which makes them very robust yet very light, allowing the speaker to move very quickly with extremely low distortion. Helping engineers, including myself, to hear the sound very cleanly and

make more accurate mixing decisions, including adding saturation and distortion exactly at needed and desired amounts.” —[Nathaniel W.](#)



Saturn

A year on Saturn is more than 29 Earth yers, but the planet spins on its axis so fast that a day on Saturn is 10 hours and 14 minutes.

See: `.sav` — file extension

scanf

function: C stdio.h library C stdio.h library function: stands for SCAN input Function

scavenger hunt

Scavenger hunts are fun for a variety of reasons:

1. **Challenge and problem-solving:** Scavenger hunts often require participants to solve riddles, puzzles, or clues to locate the items on their list. This adds an element of problem-solving, which can be both challenging and enjoyable.
2. **Social interaction and teamwork:** Scavenger hunts are often played in teams, which encourages cooperation, communication, and collaboration. This aspect of the game can foster bonding and help strengthen relationships among participants.
3. **Exploration and discovery:** Scavenger hunts encourage participants to explore their surroundings and discover new places or things. This can be particularly exciting and satisfying for those who enjoy adventure or learning about their environment.
4. **Physical activity:** Participants often need to walk, run, or even bike to find the items on their list, making scavenger hunts a fun way to get some exercise and enjoy the outdoors.
5. **Competition:** The competitive aspect of scavenger hunts can be thrilling for many players, as they race against other teams to complete their lists and win the game.
6. **Creativity:** Scavenger hunts can be customized to include unique and interesting items, allowing players to engage their creativity and imagination.
7. **Sense of accomplishment:** Successfully locating items on a scavenger hunt list can provide a sense of achievement, which is rewarding and motivating for players.
8. **Adaptability:** Scavenger hunts can be tailored to suit various ages, group sizes, and settings, making them a versatile and enjoyable activity for a wide range of participants.

[ChatGPT]

schizophrenia

28 September 2023: “About 2.8 million Americans suffer from schizophrenia (~24 million worldwide), with large portion of non-responders to available therapies.”

—[Dmitriy](#)

school safety zone

noun “An area in, on, or within a distance of 1,000 feet of the grounds of a public or private school providing instruction in kindergarten through grade 12” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7,

Schrodinger equation

“Schrodinger Equation: This equation describes how the quantum state of a physical system changes over time. It shows that the time derivative of the wave function (ψ) of the system is proportional to the Hamiltonian operator (\hbar) applied to the wave function. It is the fundamental equation of quantum mechanics and allows us to calculate the probabilities of various outcomes of measurements on the system.”

—[Science Simplified](#)

science

“Science is not about building a body of facts. It is a method for asking awkward questions and subjecting them to a reality-check, thus avoiding the human tendency to believe whatever makes them feel good.” —Terry Pratchett

school lunches

18 March 2023: “Congress ended the Free-Lunch-For-All program as we watch our children go hungry. But they bailed out banks to a tune of \$2T, in 3 days. These ppl are real-life supervillains.” —[Thia is with](#)

18 March 2023: “Republicans should keep leaning into this crusade against free school lunches. Seems like a winning issue, for them.” —[Cody Johnstone](#)

18 March 2023: “DonÕt worry ’ Governors are signing million dollar deals with Kraft to serve lunchables

Meanwhile, France is serving their kids veal with mushrooms

And we wonder why America is 31st in math globally” —[ZoyaisLove](#)



NEWS

Lunchables with 'improved nutrition' to be served at school cafeterias next year

Kraft Heinz is working on rolling out two of the popular prepackaged lunches as part of school lunch programs this fall.



Lunchables ... but make it "healthy"? **Kraft Heinz**

French lunches have multiple courses! They start with a vegetable, such as a leafy lettuce salad, a cucumber tomato salad or beets. Next up is a warm main dish, which almost always includes another veggie. Think sliced roast beef with baked potatoes, veal with mushrooms and broccoli or breaded fish with cauliflower.

Oct 22, 2019



<https://www.tasteofhome.com> › article



This Is How French School Lunches Are Different from American Ones

SCOPE

operating system

Proprietary OS by Control Data Corporation.

SCOPE (Supervisory Control Of Program Execution ran on the Lower 3000 series, Upper 3000 series, and 6x00 and related Cyber. — [Wikipedia: List of operating systems](#)

screenX

keyword: JavaScript windows method

screenY


keyword: JavaScript windows method

scroll

keyword: JavaScript windows method

sd

keyword: COBOL reserved word (z/OS)

See: `.sda`  — file extension

SeaGreen

keyword: HTML color name

SeaGreen
#2E8B57

search

keyword: COBOL reserved word (z/OS)

SeaShell

keyword: HTML color name



second

keyword: SQL reserved word (z/OS)

section

keyword: COBOL reserved word (z/OS)

security

keyword: COBOL reserved word (z/OS)

security authorization package

noun “Documents the results of the security control assessment and provides the authorizing official with essential information needed to make a risk-based decision on whether to authorize operation of an information system or a designated set of common controls.”

“Contains: (i) the security plan; (ii) the security assessment report (SAR); and (iii) the plan of action and milestones (POA&M).”

“Note: Many departments and agencies may choose to include the risk assessment report (RAR) as part of the security authorization package. Also, many organizations use system security plan in place of the security plan.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; NIST SP 800-37 Rev 1]

security control assessor (SCA)

noun “The individual, group, or organization responsible for conducting a security control assessment.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-37 Rev 1]

security control assessment

noun “The testing and/or evaluation of the management, operational, and technical security controls in an information system to determine the extent to which the controls are implemented correctly, operating as intended, and producing the desired outcome with respect to meeting the security requirements for the system.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: NIST SP 800-37 Rev 1]

U.N. Security Council

I strongly recommend that the permanent members of the U.N. Security Council, with veto power, be expanded to include Brazil, Germany, India, and Japan.

GADDAFI (2009): “We joined the United Nations because we thought we were equals, only to find that one country can object to all the decisions we make. Who gave the permanent members their status in the Security Council? Four of them granted this status to themselves.

The only country that we in this Assembly elected to permanent member status in the Security Council is China. This was done democratically, but the other seats were imposed upon us undemocratically through a dictatorial procedure carried out against our will, and we should not accept it.” —[COMBATE](#)

seersucker suit

The seersucker suit was called shirushakar in India, from the Persian words *shir* meaning milk and *shekar* meaning sugar. The East India Company traded for the Indian cloth in the 17th century.

segment

keyword: COBOL reserved word (z/OS)

segment-limit

keyword: COBOL reserved word (z/OS)

Sekhmet

Sekhmet is an Egyptian Goddess.

SEL

keyword: Objective-C word

select

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: Select (initial cap) JavaScript windows object

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

See: [@select](#) — OBJECTIVE C

self

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows property

keyword: Objective-C reserved word

keyword: Ruby reserved word

semiconductor

8 August 2023: “America invented semiconductors when we went to the moon. Today, they power our everyday lives.

Over time, our manufacturing was hollowed out. We went from producing nearly 40% of microchips down to 10%, but thanks the CHIPS and Science Act, production will be brought back home.” —[President Biden](#)

Correction to Biden's Lies: The semiconductor was invented by a German Karl Ferdinand Braun in 1874, the Semiconductor transistor was invented in US in 1947, and the Integrated circuit in 1958 also in US. all well before going to the moon.

The CHIPS money (about \$280 billion) went to a handful of large corporations that had made major campaign donations to Joe Biden and/or the Democratic Party. The money was almost all no strings attached and every company receiving the money spent some or all of the money on stock buybacks, not on semiconductor factories. After the law was passed (and therefore, no longer could be changed), Senator Elizabeth Warren complained the money had no strings attached.

Seminoles

The Seminole Nation of Oklahoma (by far the largest Seminole population, 18,800), Black Seminoles (800), and the Miccosukee Tribe of Indians of Florida (640) have ZERO approval or contract with FSU.

The Seminole Tribe of Florida (4,244) is the only one bought off by Florida State University (FSU).

Semitic

3740: “The evolution of languages provides a unique opportunity to study human population history. The origin of Semitic and the nature of dispersals by Semitic-speaking populations are of great importance to our understanding of the ancient history of the Middle East and Horn of Africa. Semitic populations are associated with the oldest written languages and urban civilizations in the region, which gave rise to some of the world's first major religious and literary traditions. In this study, we employ Bayesian computational phylogenetic techniques recently developed in evolutionary biology to analyse Semitic lexical data by modelling language evolution and explicitly testing alternative hypotheses of Semitic history. We implement a relaxed linguistic clock to date language divergences and use epigraphic evidence for the sampling dates of extinct Semitic languages to calibrate the rate of language evolution. Our statistical tests of alternative Semitic histories support an initial divergence of Akkadian from ancestral Semitic over competing hypotheses (e.g. an African origin of Semitic). **We estimate an Early Bronze Age origin for Semitic approximately 5750 years ago in the Levant, and further propose that contemporary Ethiosemitic languages of Africa reflect a single introduction of early Ethiosemitic from southern Arabia approximately 2800 years ago.**

Semitic languages comprise one of the most studied language families in the world. Semitic is of particular interest due to its association with the earliest civilizations in Mesopotamia (Lloyd 1984), the Levant (Rendsburg 2003) and the Horn of Africa (Connah 2001), which gave rise to several of the world's first major religious traditions (Judaism, Christianity and Islam) and literary works (e.g. the Akkadian poem *The epic of Gilgamesh*). The importance of Semitic dates back at least 4350 years before present (YBP) to ancient Sumer in Mesopotamia, where the Akkadian language replaced Sumerian (Buccellati 1997). From this time forward, archaeological evidence for Semitic among the Hebrews and Phoenicians in the Levant (Diakonoff 1998; Rendsburg 2003) and the Aksumites in the Horn of Africa (Connah 2001) suggests that Semitic-speaking populations and their languages underwent a complex history of geographical expansion, migration and diffusion tied to the emergence of the earliest urban civilizations in these regions (Lloyd 1984; Connah 2001; Richard 2003b; Nardo 2007). Uncertainties about key details of this history persist despite extensive archaeological, genetic and linguistic studies of Semitic populations. A more comprehensive understanding of the precise origin and relationship of Semitic populations to each other is necessary to fully appreciate their complex history.

Although multiple genetic studies of extant Semitic-speaking populations have been conducted (Nebel et al. 2002; Capelli et al. 2006), much is still unknown about the genealogical relationships of these populations. Most previous genetic studies focus on time frames that are either too recent (the origin of Jewish communities in the Middle East and Africa; Hammer et al. 2000; Nebel et al. 2001; Rosenberg et al. 2001) or too ancient (the out-of-Africa migration of modern humans; Passarino et al. 1998; Quintana-Murci et al. 1999) to provide insight about the origin and dispersal of Semitic languages and Semitic-speaking populations.

Previous historical linguistic studies of Semitic languages have used the

comparative method to infer the genealogical relationships of Semitic (for review, see Faber 1997). The comparative method is a technique that uses the pattern of shared, derived changes in language (vocabulary, syntax or grammar), termed innovations, to assess the relative relatedness of languages, although this method cannot date the divergences between languages (Campbell 2000). Cognates, which are words that generally share a common form and meaning through descent from a common ancestor (e.g. the English word 'night' is a cognate with the German word 'Nacht'), serve as the data used most often in comparative analyses.

The field of Semitic linguistics has generally coalesced around a model that places the ancient Mesopotamian language Akkadian as the most basal lineage of Semitic (Hetzron 1976; Faber 1997). This standard model divides Semitic into East Semitic, composed of the extinct Akkadian and Eblaite languages, and West Semitic, consisting of all remaining Semitic languages that are distributed from the Levant to the Horn of Africa. West Semitic is in turn divided into South (consisting of Ethiosemitic, Epigraphic South Arabian and Modern South Arabian (MSA)) and Central linguistic groups, but the genealogical relationships of the languages within these two groups are poorly defined (Huehnergard 1990, 1992; Rodgers 1992; Faber 1997). Additionally, no consensus exists for placing Arabic in either the Central or South Semitic group (Hetzron 1976; Blau 1978; Diem 1980; Huehnergard 1990, 1992; Faber 1997), which makes Arabic's genealogical location simultaneously uncertain and interesting, as Central and South Semitic are geographically and genealogically distinct entities.

Dating language divergences has been controversial, especially when linguistic clocks are involved (for discussion, see Renfrew et al. 2000). The existence of a linguistic clock is controversial as it assumes that languages evolve at a fixed rate (Ehret 2000), whereas there is evidence for variation in rates of change between words and languages and no reason why languages should evolve at fixed rates (Blust 2000). However, recent studies have shown that much variation in the rates of linguistic change may follow generalized rules that apply across language families (Pagel et al. 2007; Atkinson et al. 2008). This suggests that variation in the rates of change between words and languages can be modelled by applying techniques used in evolutionary biology (e.g. probabilistic modelling of relative rates of word change with relaxed clock or covarion models of language evolution). Computational phylogenetic methods such as these are consistent with the philosophical underpinnings of the linguistic comparative method (i.e. inferring relationships by the comparison of similar features between languages) and provide an objective statistical framework to accurately estimate language divergences. Furthermore, Bayesian phylogenetic methods offer distinct advantages by allowing for the inclusion of multiple lines of evidence as prior probabilities, incorporating the uncertainty of model parameters in posterior probability estimates, and providing straightforward statistical comparisons of models via Bayes factors (BFs).

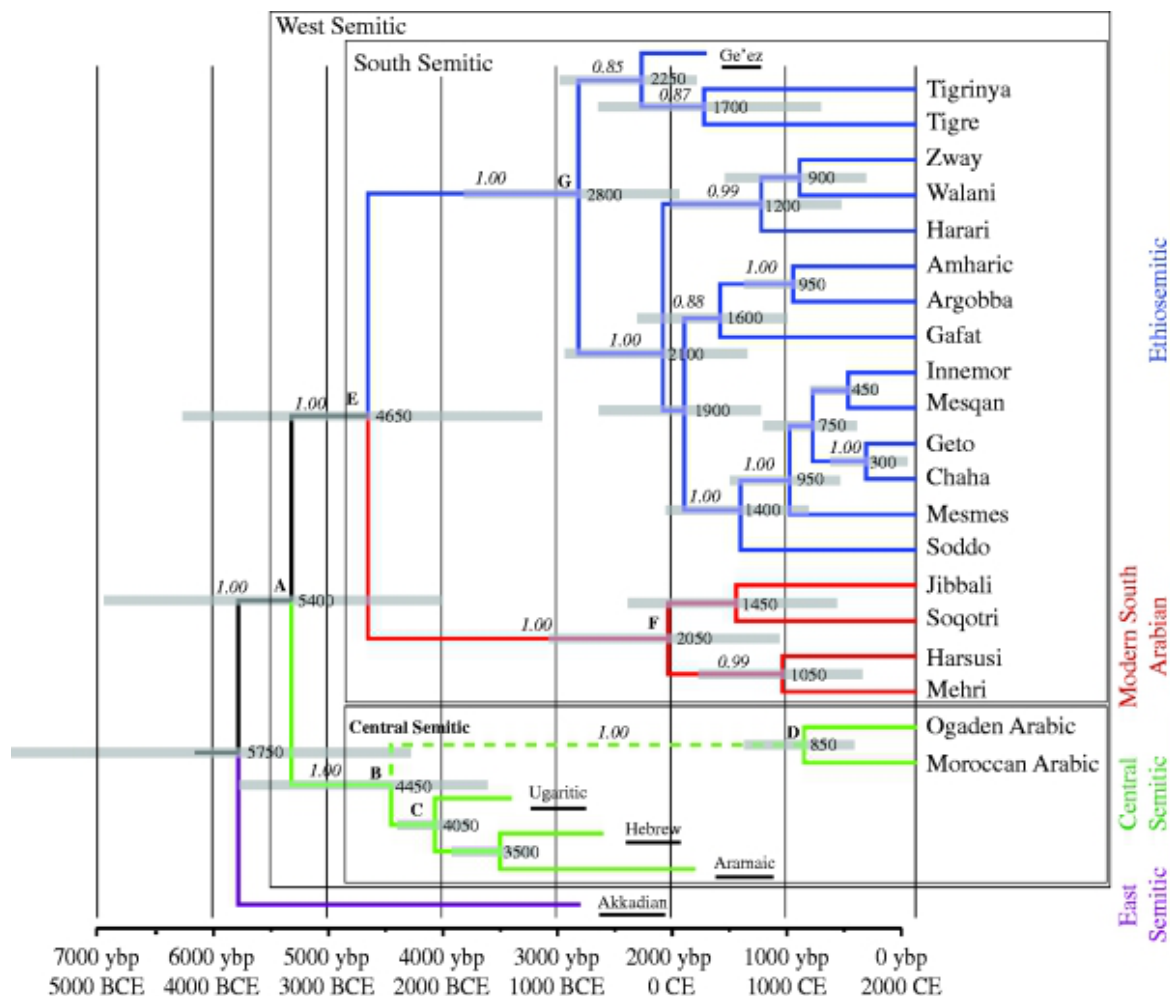
In this study, we analyse lexical data from 25 Semitic languages distributed throughout the Middle East and Horn of Africa (figure 1) using a Bayesian phylogenetic method to simultaneously infer genealogical relationships and estimate

integrated model of Semitic history.” — [Bayesian phylogenetic analysis of Semitic languages identifies an Early Bronze Age origin of Semitic in the Near East](#)



Map of Semitic languages and inferred dispersals. The locations of all languages sampled in this study, both extinct and extant, are depicted on the map. The current distribution of Ethiosemitic languages follows Bender (1971) and distribution of the remaining languages follows Hetzron (1997). The ancient distribution of extinct languages is also indicated (i.e. Akkadian, Biblical Aramaic, Ge'ez, ancient Hebrew and Ugaritic; Bender 1971; Hetzron 1997). The West Gurage (Chaha, Geto, Innemor, Mesmes and Mesqan) and East Gurage (Walani and Zway) Ethiosemitic language groups in central Ethiopia are depicted as two combined groups. The map also presents the dispersal of Semitic languages inferred from our study. An origin of Afroasiatic along the African coast of the Red Sea,

2) are placed on the arrows to indicate where and when these divergences occurred.



Phylogeny of Semitic languages. Our phylogeny of 25 Semitic languages based on binary encoded data is presented with mean divergence times to the right of each node and 95% HPD intervals indicated by light grey bars. The scale bar along the bottom of the phylogeny presents time in YBP. Posterior probabilities of branches are printed in italics above each branch with >0.75 support. Extinct languages are underlined and all other languages are considered to evolve to the present. Subgroups of Semitic are identified by colour bars to the right of the phylogeny (purple bars, East Semitic; green bars, Central Semitic; red bars, MSA; and blue bars, Ethiosemitic) and by three boxes (West, Central and South Semitic). Important nodes are indicated by letters: A, West Semitic; B, Central Semitic; C, UgariticÐHebrewÐAramaic; D, Arabic; E, South Semitic; F, MSA; and G, Ethiosemitic. The dashed line leading to Arabic reflects the fact that log₂BF tests were equivocal in the placement of Arabic, so we placed Arabic in Central Semitic based on previous linguistic studies (e.g. Hetzron 1976; Faber 1997). The topology is rooted with Akkadian, which is preferred by our log₂BF analyses, and follows the constraints of the standard model.

The major Semitic languages are: Arabic, Amharic (spoken in Ethiopia), Tigrinya (spoken in Ethiopia and Eritrea), Hebrew, Tigre (spoken in Sudan), Aramaic (spoken in Lebanon, Syria, Israel, Iraq and Iran) and Maltese.

send

keyword: COBOL reserved word (z/OS)

Senegal

3 August 2023: “BREAKING:

The Senegalese Government has announced today that it will send Military Forces to Support any kind of Armed Intervention led by ECOWAS against Niger.

So far the ECOWAS (controlled by USA and France) Members of Nigeria, Senegal, and Ivory Coast have all stated they will assist with a Military Operation against Niger.

The world must send weapons to Niger to get rid of the aggressor!!!” —[Megatron](#)

senet

“Senet was a board game from ancient Egypt for two players. This set inscribed with the Horus name of Amenhotep III is from the period 1391Ð1353 BCE”

—[Massimo](#)



“The game was played using a set of four casting sticks, which were similar to dice. The player would roll the casting sticks and then move their pawns according to the results. The game was also complicated by the fact that there were special squares on the board that could have different effects on the player’s pawns.” —[AstroDude](#)

“Senet boards typically had 30 squares arranged in a rectangular pattern. Some of these squares had special meanings, such as “House of Water” or “House of Three,” which were associated with different aspects of the game.” —[Namer](#)

“Senet was played on a rectangular board with 30 squares arranged in three rows of ten. Each player had a set of game pieces, often differentiated by shape or color.” —[Talha Ijaz](#)

“Senet Game Board of Tutankhamun

King Tutankhamun was buried with no fewer than five senet game boxes. Senet was an ancient Egyptian board game popular with all classes.

Archaeological evidence reveals that senet was played by both royalty (as demonstrated by this elaborate ivory set) and commoners (crude boards scratched in rock). The course of the game was thought to parallel the course of the deceased through the underworld.

The ancient Egyptians believed in an afterlife, which means an existence after death. To reach the afterlife, a person who died had to perform certain rituals and pass many obstacles.

In the New Kingdom, the game senet, which means “passing,” became associated with the journey to the afterlife.

Its full ancient name was senet net hab, which means ‘game of passing through’; this is because the aim of the game is to get from one end of the board to the other.”

—[NTR of Pharaoh Khonsu Heru](#)



sentence

keyword: COBOL reserved word (z/OS)

seperate

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

sequence

keyword: COBOL reserved word (z/OS)

sequential

keyword: COBOL reserved word (z/OS)

sequentially

keyword: SQL reserved word (z/OS)

Serbia

On 26 May 2023 Serbian President Aleksandar Vucic placed the nation's army on full combat alert and ordered troops moved closer to the border with neighboring Kosovo.

The action is in response to Serbs clashing with Kosovo police in the northern Kosovo municipalities of Zvecan, Leposavic, and Zubin Potok after the recent election of ethnically ALbanian mayors. Local Serbs, a majority in the area, had boycotted the elction.

See: serine

service

keyword: COBOL reserved word (z/OS)

session

keyword: SQL reserved word (ANSI, Oracle)

set

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

setInterval

keyword: JavaScript windows method

setTimeout

keyword: JavaScript windows method

severity

keyword: VHDL reserved key word

sex education

“How and when did we let republicans start calling sex education booke and classes “pornography” and that just become the cominating narrative?” —[@JUNIPER](#)

Tupac Shakur

“They got money for wars, but can’t feed the poor.” —Tpac Shakur

shampoo

the word "shampoo" comes from Hindu (meaning to massage) from Sanskrit chapati (चपति) and in English originally meant any type of pressing, kneeding, or soothing. In the 1860 it gained the additional meaning of washing the hair and in the 1950s was extended to mean washing carpets and other materials.

share

keyword: SQL reserved word (Oracle)

shared gold

1 August 2021: Gianmarco Tamberi and Mutaz Barshim, tied for first, agreed to share the gold medal for pole vaulting at the Tokyo Olympic Games.

23 August 2023: Katie Moon and Nina Kennedy, tied for first, agreed to share the gold medal for pole vaulting at the World Athletics Championships 2023.

SHARE Operating System (SOS)

operating system

Proprietary OS by IBM

for the IBM 704 and 709 — [Wikipedia: List of operating systems](#)

Sharia

18 November 2023: “It’s pretty ironic that the only people worried about Muslims bringing Sharia law to the US (despite being only 1% of the population & usually

moderate, often having immigrated to escape radicalism) are the Americans whose own views on crime & punishment are closest to Sharia law” —[They Say Billionaires Taste Like Pork](#)

See: Sheikh Zayed Grand Mosque

shibari

Shibari, also known as Kinbaku, is a form of Japanese rope bondage. It’s important to understand that Shibari is not just about tying knots but is deeply rooted in culture, aesthetics, and communication between the participants.

Safety is crucial in Shibari, as with any form of bondage or BDSM play. It’s important to be aware of nerve pathways when applying ropes and to always have safety shears at hand to quickly release someone if needed. Moreover, practicing Shibari requires mutual consent, trust, and communication between all parties involved. It’s often recommended to learn from experienced practitioners or through reputable workshops to ensure both safety and understanding of the art.

See also: column ties
See also: hishi karada (daimond pattern tie)
See also: futomomo (thigh tie)
See also: gote shibari (box tie)
See also: takate kote
See also: hojojutsu
See also: kannuki (cross cinch)
See also: ebi shibari (shrimp tie)
See also: teppo shibari (rifle tie)
See also: suspensions

shift-in

keyword: COBOL reserved word (z/OS)

shift-out

keyword: COBOL reserved word (z/OS)

shobi-zue

noun “A staff, crutch, stick, rod, or pole concealing a knife or blade which may be exposed by a flip of the wrist or by a mechanical action (Penal Code Section 17160)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

short-barreled rifle

noun “A firearm designed or redesigned to fire a fixed cartridge; it has a barrel length of less than 16 inches or an overall length of less than 26 inches (Penal Code Section 17170)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

short-barreled shotgun

noun “A firearm designed or redesigned to fire a fixed shotgun shell; it has a barrel length of less than 18 inches or an overall length of less than 26 inches (Penal Code Section 17180)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

shrimp tie

Ebi Shibari (Shrimp Tie): This bends the person forward, causing a posture reminiscent of a shrimp.

See also: shibari

short

keyword: C keyword: data modifier

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

See: shrine maiden

shuriken

noun “A metal plate having three or more points with one or more sharp edges and is designed as a throwing weapon (Penal Code Section 17200)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Sidon

Sidon, Lebanon, is about 6,000 years old.

Siemens S5-DOS/MT

abbreviation

operating system

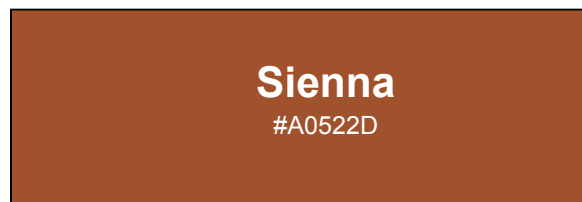
Proprietary OS by Digital Research, Inc.

an industrial control system based on FlexOS — [Wikipedia: List of operating systems](#)

DOS

Sienna

keyword: HTML color name



sign

keyword: COBOL reserved word (z/OS)

signal

keyword: VHDL reserved key word

signed

keyword: Objective-C reserved word

Silver

keyword: HTML color name

A rectangular color swatch with a thin black border. The background is a solid light gray color. The word "Silver" is written in bold black text, and the hex code "#C0C0C0" is written in a smaller black font below it.

Silver

#C0C0C0

simple_nested_loop

keyword: SQL reserved word (z/OS)

sin

function: C math.h library function: stands for SINE

single-column ties

Single- and Double-Column Ties: These are foundational ties that bind a limb (or multiple limbs) to an object or to another limb. They're called "column" ties because they wrap around cylindrical shapes, like wrists or ankles.

See also: shibari

single payer



“Per person, prescription drug spending increased from \$140 in the 1980s to \$1,025 in 2017.”

sinh

function: C math.h library function: stands for SINE Hyperbolic

sink

Sinks (also called sinker, hand basin, or wash basin) are on average about 15 inches or 38 centimeters deep.

SIPROS (Simultaneous Processing Operating System)

operating system

Proprietary OS by Control Data Corporation.

SittingBull

“The love of possessions is a disease with them [Americans]. They take tithes from the poor and weak to support the rich who rule. They claim this mother of ours, the Earth, for their own and fence the neighbors away.

If America had been twice the size it is, there still would not have been enough.” —
Sitting Bull

shared

keyword: VHDL reserved key word

size

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle)

sizeof

keyword: C keyword

keyword: Objective-C reserved word

skip1

keyword: COBOL reserved word (z/OS)

skip2

keyword: COBOL reserved word (z/OS)

skip3

keyword: COBOL reserved word (z/OS)

Skittles

Skittles are banned in the European Union and Norway because of the artificial colors yellow 5 and yellow 6, which are linked to allergic reactions and childhood hyperactivity, as well as titanium dioxide, which is carcinogenic and caused lung tumors in rats.

SkyBlue

keyword: HTML color name



sla

keyword: VHDL reserved key word

SlateBlue

keyword: HTML color name



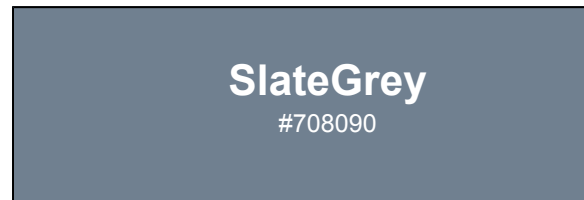
SlateGray

keyword: HTML color name



SlateGrey

keyword: HTML color name



slaughter

Average number of animals slaughtered for food per day, world wide totals, for 2021:

900,000 cows

1.4 million goats

1.7 million sheep

3.8 million pigs

11.8 million ducks

202 million chickens (140,000 chicken per minute)

hundreds of millions of fish

slavery

“The US stands today as one of the most unequal societies in the history of the world. The richest 1% own 40% of the country’s wealth while a larger share of working-age people live in poverty than in any other nation belonging to the OECD.” —1619 Project

“Slavery shaped our political institutions and founding documents, our laws governing private property and financial regulation, our management techniques and accounting systems, and our economic systems and labor unions.” —1619 Project

Anti-slavery efforts started in what became the US in Rhode Island in 1652.

The Religious Society of Friends (Quakers) challenged the slave laws & started the abolitionist movement.

It can take centuries to change the injustice embedded into the US government.

“The Baga people are an ethnic group in Guinea. They died fighting European slavers for decades. Their Chief, Tomba, was captured and forced into the slave ship, he died leading a slave revolt on the ship. Teach your kids about African heroes who died for us to be free.” —[Adémólá](#)

“The Europeans that came to capture Africans into slavery were all Christians. In fact, the slave ship had Christian names. The name of the first English slave ship that arrived at African coast in October 1562 to capture 300 Africans was called The Jesus Ship.” —[Adémólá](#)

“Racist caricatures of Native Americans and associated team mascots are about as much of an “honor” as this” —[Brett Chapman](#)

9 July 2023: “An example of some of the “first slaves” in America with “a head frame and mouthpiece to prevent his eating, collar spurs, and a fifty-five-pound weight fastened to his body to prevent him from running.” Tell me again how they were treated well, and accepted like family.” —[Kenny Akers](#)



7 August 2023: “Ron DeSantis’ administration [Florida, USA] has approved “Prager University” videos to teach kids about slavery. Prager U is a fake, unaccredited far-right organization.

One of their “kids videos” has Christopher Columbus telling them that slavery was ‘no big deal.’ ” —[No Lie with Brian Tyler Cohen](#)






12 January 2024: “Slavery was the engine that built American capitalism. and it is time America pay reparation.” —[Don Salmon](#)

GREAT SALE of SLAVES

JANUARY 10, 1855


 HERE Will Be Offered For Sale at Public Auction, at the SLAVE MARKET, CHEAPSIDE, LEXINGTON, All The SLAVES of JOHN CARTER, Esquire, of LEWIS COUNTY, KY., On Account of His Removal to Indiana, a Free State. The Slaves Listed Below Were All Raised on the CARTER PLANTATION at QUICK'S RUN, Lewis County, Kentucky.

3 Bucks Aged from 20 to 26, Strong, Ablebodied
1 Wench, Sallie, Aged 42, Excellent Cook
1 Wench, Lize, Aged 23 with 6 mo. old Picinniny
One Buck Aged 52, good Kennel Man
17 Bucks Aged from twelve to twenty, Excellent

TERMS: Strictly CASH at Sale, as owner must realize cash, owing to his removal to West. Offers for the entire lot will be entertained previous to sale by addressing the undersigned.

JOHN CARTER, Esq.
 Po. Clarksburg Lewis County, Kentucky

See: sleep

sl

keyword: VHDL reserved key word

slungshot

noun “A device consisting of a small mass of metal or stone fixed on a metal handle or strap (Penal Code Section 16760)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

smallint

keyword: SQL reserved word (ANSI, Oracle, z/OS)

smartphones

In 1926 Tesla predicted many of the features of smartphones (small device, wireless, telephone, video, etc.). But his prediction failed miserably because he claimed we would keep the device in our vest pocket. Who wears vests anymore?

SNAP

28 May 2023: “The Democratic president just approved a budget deal that forces people in poverty into more onerous work requirements on SNAP just to be able to eat. Do not vote for democrats - they don’t vote for you.” —[Professor Anthony Zenkus](#)

2 June 2023: “Consider that SNAP (i.e., food stamps) is a de facto subsidy for the agriculture industry. As part of the Farm Bill, the program keeps supply chains afloat for the agriculture industry and grocery stores. Instead of increasing access to food stamps during a time when millions of Americans are struggling to afford groceries, we are needlessly restricting access to it by adding more byzantine requirements to qualify. What happens when millions of people can’t afford food? Corporations supplying the food will raise prices to compensate for the loss to their profit margins. This is also known as inflation. In addition to new restrictions on food stamps, millions of students will now face increased financial hardship with the resumption of interest payments. 43 million people in the US carry student debt, with ~\$1.75 trillion outstanding. Consider that when the unemployment insurance benefits from COVID

expired in September 2021, inflation increased soon after that; millions of Americans were in financial hardship. Inflation happens when corporations maintain their profit margins to account for lost sales.” —[Friesein](#)

2 June 2023: “Nearly every democrat voted to cut SNAP benefits and fast track oil and gas projects like the Mountain Valley Pipeline. Lesser evil doesn’t exist.” —[Birriion](#)

23 August 2023: “Harvard University recently encouraged its graduate students to enroll in government food assistance programs amid ongoing discussions about its immense wealth and growing scrutiny regarding the extent of support provided to its student community.

Harvard’s Health Services office circulated a flier promoting a sign-up event encouraging graduate students to participate in the SNAP program, Yahoo Finance reported.Ê

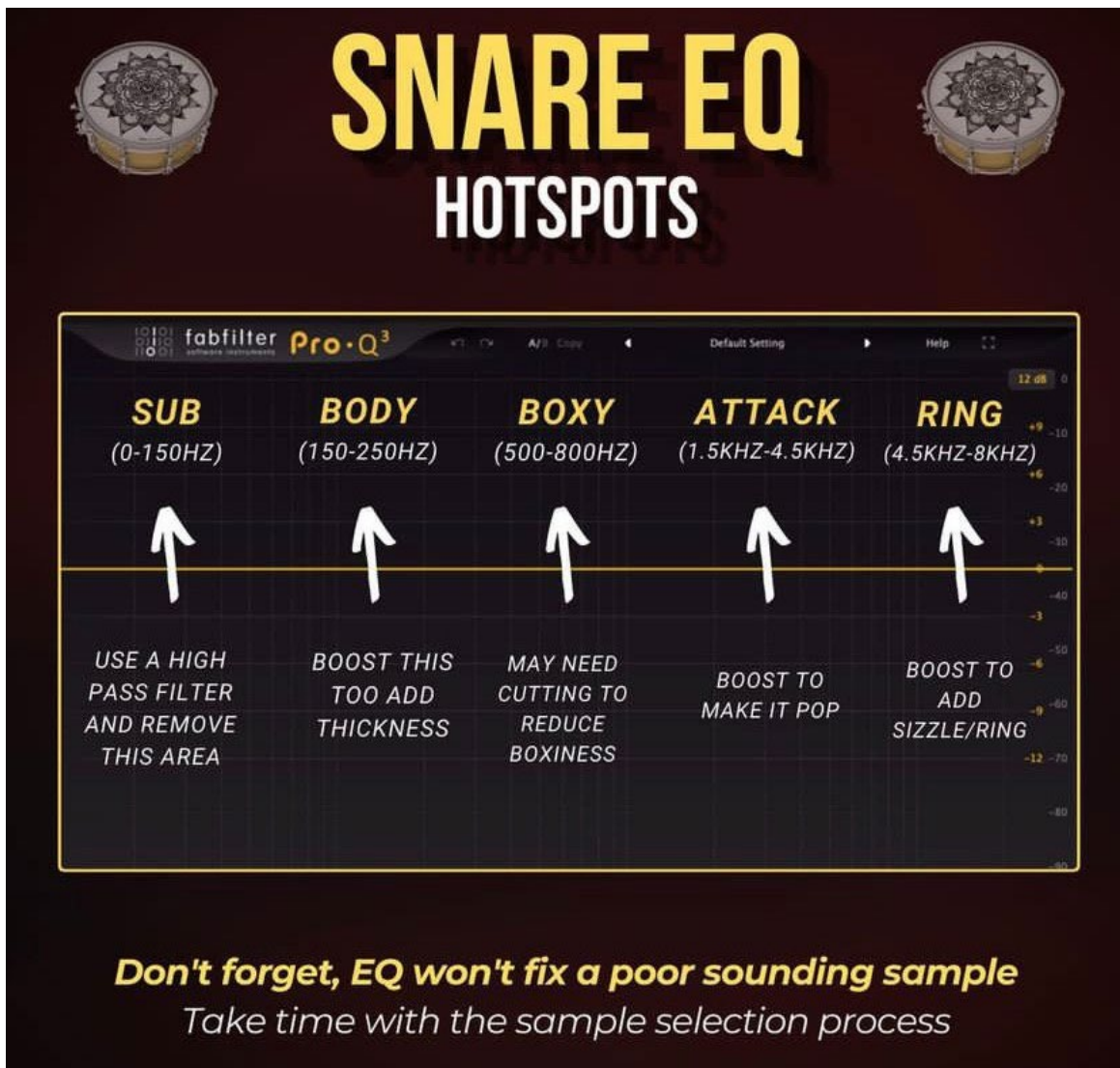
The flyer’s message emphasized the importance of maintaining nourishment and a stocked pantry, highlighting the potential eligibility of grad students for aid in covering food and grocery expenses.

Renowned as the wealthiest academic institution on a global scale, Harvard University boasts a substantial endowment of approximately \$53 billion.”

—[NewsNation](#)

snare

1 September 2023: “snare eq cheat sheet” —[Solar Heavy](#)



SNARE EQ HOTSPOTS

The graphic displays the FabFilter Pro-Q3 EQ interface with five frequency bands highlighted by white arrows pointing to the 0dB line:

SUB	BODY	BOXY	ATTACK	RING
(0-150HZ)	(150-250HZ)	(500-800HZ)	(1.5KHZ-4.5KHZ)	(4.5KHZ-8KHZ)
USE A HIGH PASS FILTER AND REMOVE THIS AREA	BOOST THIS TOO ADD THICKNESS	MAY NEED CUTTING TO REDUCE BOXINESS	BOOST TO MAKE IT POP	BOOST TO ADD SIZZLE/RING

Don't forget, EQ won't fix a poor sounding sample
Take time with the sample selection process

See: .snd — file extension

See: .sng — file extension

Snow

keyword: HTML color name

Snow
#FFFAFA

Edward Snowden

11 January 2024: “When I worked for the Bush-era CIA—down the street from the @UN HQs—I learned we were relentlessly infiltrating & undermining UN and @IAEAorg (nearby in Vienna) bodies to thwart perceived anti-war “lawfare.” Hard to imagine @CIJ_ICJ won’t face similar efforts to prevent justice.” —[Edward Snowden](#)

13 January 2024: “No matter your politics, it should appall you that the media outlets which claim to care the most about “misinformation” suppressed coverage of South Africa’s case against the Gaza genocide, but fully covered Israel’s defense the next day—intentionally denying you the full story.” —[Edward Snowden](#)

13 January 2024: “The good news is that this is a one-time thing, and they would never do this when covering elections, pandemics, the scrupulously legal and totally uninteresting mass surveillance that’s logging your viewing of this tweet right this second, or our ten thousand endless proxy wars.” —[Edward Snowden](#)

13 January 2024: “If I had to explain how the American Century collapsed in just 3 points, I might say:

- * Impoverishing the worker via union-busting and off-shoring
- * Unleashing the state by abandoning the gold standard
- * Continuously erasing essential liberties post-9/11

What are your 3?” —[Edward Snowden](#)

socialism

“Capitalism is war; socialism is peace.” —Karl Liebknecht

“When I give food to the poor, they call me a saint. When I ask why the poor have no food, they call me a communist.” —Dom Helder Camara, *Dom Helder Camara: Essential Writings*

“We’re going to fight racism not with racism, but we’re going to fight with solidarity. We say we’re not going to fight capitalism with black capitalism, but we’re going to fight it with socialism.” —Fred Hampton

“I should tie myself to no particular system of society other than socialism.” —Nelson Mandela

“Marriage is socialism among two people.” —Barbara Ehrenreich

“You show me a capitalist, and I’ll show you a bloodsucker.” —Malcolm X

23 August 2023: “Saving our planet, providing everyone healthcare & housing, & workers owning the means of production is not extreme.

Waging endless wars, commodifying basic rights, & 3 billionaires owning more wealth than half of our nation is extreme.

Socialism is not extreme, capitalism is.” —[Ryan Knight](#)

18 March 2023: “Say no to Socialism for the rich and rugged individualism for the poor!” —[Dark Warlord](#)



8 January 2024: “Socialism is the fire department saving your house. Capitalism is the insurance company denying your claim.” —[DrLearnALot](#)

social media

4 August 2023: “Only thing the US does these days is finance capitalism. All sorts of leeches bleeding people’s bank accounts for this or that fee for mortgage, rent, insurance, subscriptions to stupid junk, and now Elmo & Zuck think people will pay for *corporate social media*.

Hard pass.” —[Eric Saeger, Obscure Author & Rate-Limited Goblin](#)

social mobility

28 August 2023: “In a country with low social mobility, like the USA, most people will die in the same or similar economic situation they were born into.

Once you count in race, gender, disability, and other factors, it's possible to predict fairly accurately the economic fortunes of a baby when it is born.

There are outliers of course. People who succeed despite their situation, or on the other end, people who fail despite being born with many advantages.

But they are few and far between.

The chances of being born into the lowest economic 20% and ending up in the highest 20% are about 1 in 20.

In the land of opportunity, the biggest opportunity is being born rich.

What's worse, the trend in the US is towards even less social mobility.

The American Dream is a myth. And it's becoming more and more so.

Again, there are exceptions and the exceptionally lucky can win this lottery, but as a system it is completely broken.

Not surprisingly, countries with strong social nets, free healthcare, free schools, etc create much better chances for people to succeed despite their family status at birth.

The top 10 countries with the most social mobility in the world are all in Europe, with the Scandinavian countries taking the top 5 spots.

Some people demeaningly call these countries socialist, although they all have very strong capitalist markets.

Most importantly they create more equal playing fields. A chance to succeed for more people. No matter their status at birth.” —[Halli](#)

Social Security

1983: “Joe Biden floats the idea of raising the retirement age” —
BernieSanders.com

1984: “Joe Biden partners with Republicans to co-sponsor a freeze on Social Security” —BernieSanders.com

1985: “Joe Biden says he's tried four times to freeze Social Secuirty, Medicare, Medicaid, and veterans' benefits” —BernieSanders.com

1985: “Joe Biden says he's tried four times to freeze Social Secuirty, Medicare, Medicaid, and veterans' benefits” —BernieSanders.com

1995: “Joe Biden votes for Balanced Budget Amendments that cut Social Secuirty, Medicare, Medicaid, and veterans' benefits” —BernieSanders.com

1996: “Joe Biden floats the idea of chained CPI cuts to Social Security” — BernieSanders.com

1997: “Joe Biden votes AGAIN for that cut Social Secuirty, Medicare, Medicaid, and veterans’ benefits” —BernieSanders.com

2007: “Joe Biden brags that he’s proud of his support for a Social Security age increase” —BernieSanders.com

2007: “Joe Biden proposes a Social Security plan that is open to raising the retirement age” —BernieSanders.com

2007: “Joe Biden tells NBC’s Meet the Press that cuts to Social Security and Medicare should “absolutely” be on the table” —BernieSanders.com

2018: “Joe Biden says Social Security and Medicare ‘still need adjustments’ ” — BernieSanders.com

30 July 2023: “Biden nominated Andy Biggs to sit on the Social Security Advisory Board, and now the Dems want you to think they are for protecting Social Security and Medicare. Right.” —[Etaoin Shrdlu](#)

society

18 March 2023: “Since our culture was transformed by the Reagan/Thatcher matrix, we are told we should live as solitary predators thinking only of our own fat and a few offspring, while the wealthy can hunt as wolves and enjoy the full benefits of a collective while remaining rugged individuals.” —[mousdrvr](#)

software engineering

Margaret Hannilton invented the term “software engineering”. She was director of the Software Engineering Division of the MIT Instrumentation laboratory and led the team that produced the navigation software for the Apollo Project.

Qasem Soleimani

Donald Trump ordered the assassiantion of Iranian Major General Qasem Soleimani.

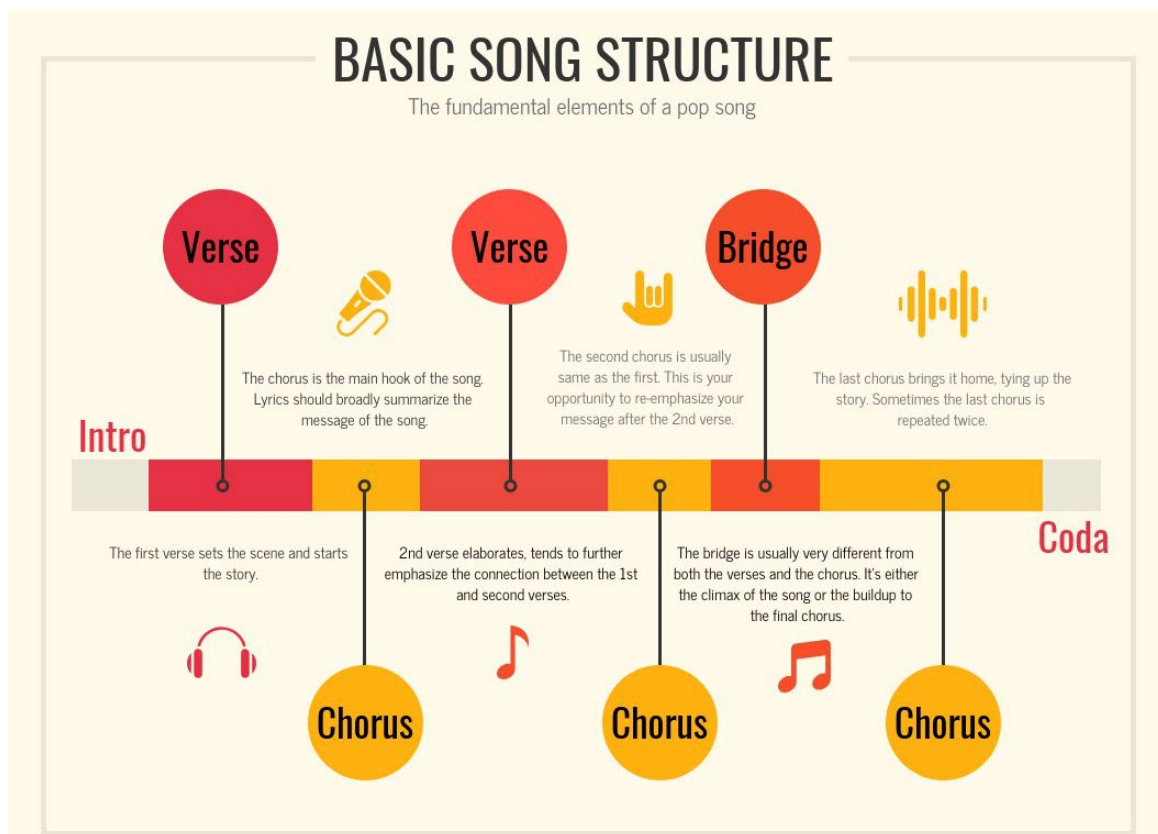
songs

7 September 2023: “your job isn’t to force sounds into your song until they sound right but to discover the ones that naturally fit” —[Solar Heavy](#)

8 September 2023: “Subtracting sounds is really an art form” —[MajinBrad](#)

song structure

17 September 2023: “song structure cheat sheet” —[Solar Heavy](#)



sort

keyword: COBOL reserved word (z/OS)

sort-control

keyword: COBOL reserved word (z/OS)

sort-core-size

keyword: COBOL reserved word (z/OS)

sort-file-size

keyword: COBOL reserved word (z/OS)

sort-merge

keyword: COBOL reserved word (z/OS)

sort-message

keyword: COBOL reserved word (z/OS)

sort-mode-size

keyword: COBOL reserved word (z/OS)

sort-return

(z/OS)

keyword: COBOL reserved word

See: SOS — operating system

Soundcloud

11 January 2024: “a really cool feature with Studio One is being able to export your songs to Soundcloud but not only that you can import songs from your Soundcloud and other songs from people you follow for remixes or collabs” — [JUSTIN](#)



sound descriptions

1 December 2023: “Sound descriptions

There are a lot of them, here are 10.

1. Warm: Refers to a sound that is full, rich, and pleasing. It often involves a balance of low and mid-range frequencies.
2. Bright: Indicates a sound that is clear, sharp, and contains prominent high

frequencies. It can add a sense of clarity and presence.

3. Creamy: Describes a smooth and velvety sound. It's a subjective term used to describe a pleasant sonic texture.

4. Rich: Signifies a sound with a full spectrum of frequencies and harmonics, providing depth and complexity. A rich sound is often considered full-bodied and immersive.

5. Harsh: Refers to a sound that is grating, strident, or unpleasant. It usually involves an excess of high frequencies that can be piercing to the ears.

6. Mellow: Indicates a soft, smooth, and gentle sound. A mellow tone often lacks harshness or sharpness, creating a soft tone.

7. Crisp: Describes a sound with clear, well-defined transients, especially in the high frequencies. It's associated with sharpness and precision.

8. Boomy: Refers to a sound with excessive low frequencies, often resulting in a muddy or overpowering quality. It can lack clarity and definition.

9. Sibilant: Describes a sound that emphasizes hissing or sharp "s" and "sh" sounds. It can be an issue in audio when these frequencies are overly pronounced.

10. Hollow: Indicates a sound lacking fullness, often with an emphasis on mid-range frequencies. It can create a sense of emptiness or muddiness in the audio.

These terms are subjective and can vary based on individual preferences and the context in which they are used." —[Nathaniel W.](#)

sound finder

7 December 2023: "Before the development of radar, military personnel relied on various methods to detect and track incoming enemy aircraft.

One such method involved utilizing "sound finders," also known as acoustic locators. These devices, which resembled large funnels or megaphones, were positioned strategically to intercept the sound waves emitted by approaching airplanes. There were even portable versions.

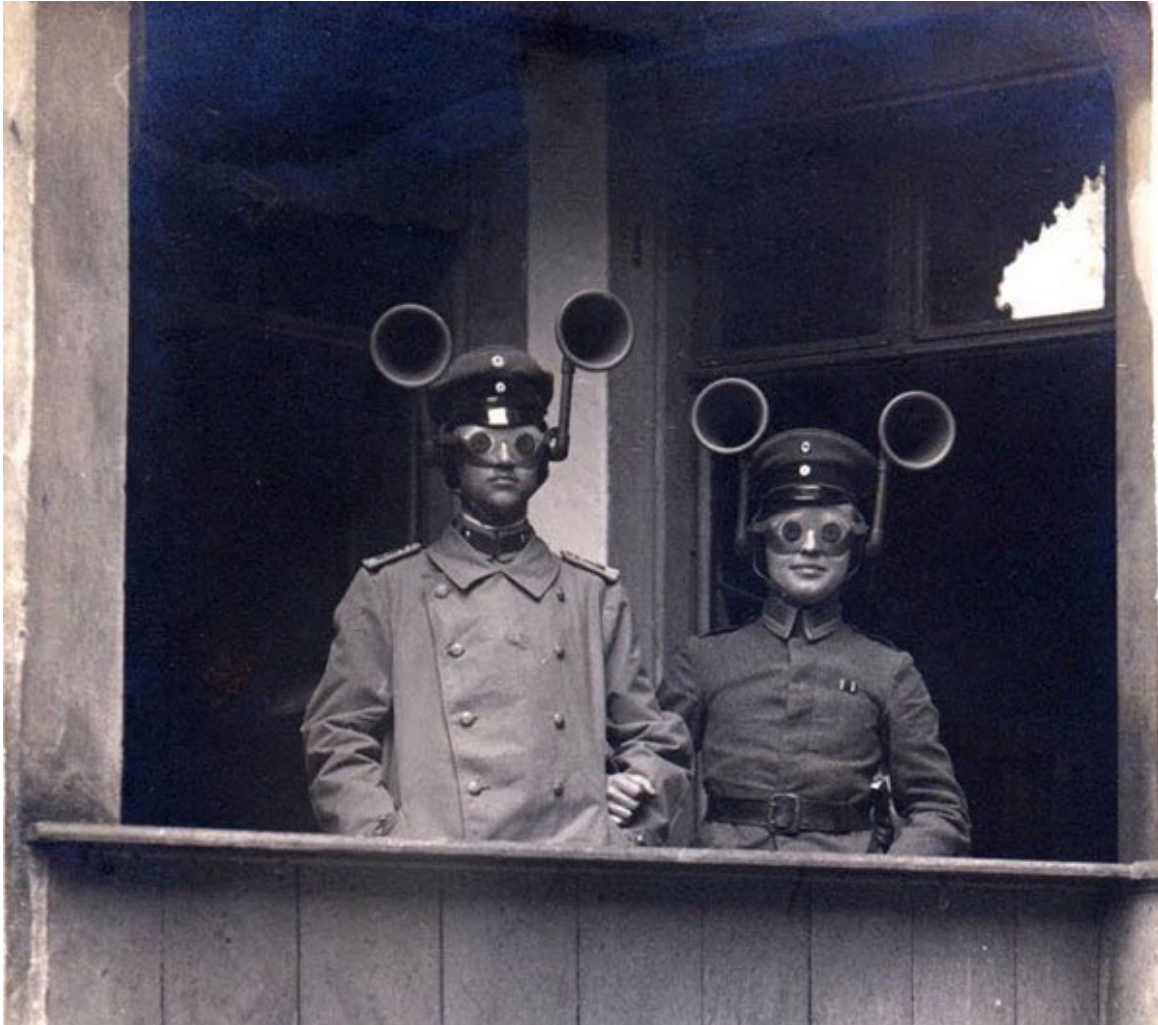
Sound finders worked by employing the principle of triangulation. By analyzing the subtle differences in the sound reaching each of the device's two or three horns, operators could pinpoint the approximate direction of the sound source. The closer the aircraft was, the more pronounced the difference in sound intensity between the horns. This information was then relayed to anti-aircraft batteries, allowing them to anticipate the enemy's approach and prepare their defenses.

Sound finders were initially deployed during World War I, particularly in the early stages of aerial warfare. While they provided valuable information about the enemy's position, they were not without their limitations. Their effectiveness was hampered by factors such as atmospheric conditions, background noise, and the complexity of interpreting the subtle sound variations. Additionally, sound finders were primarily suitable for detecting low-flying aircraft, as higher-flying planes were more difficult to

discern against the background noise.

The advent of the first practical radar systems sent the sound finder into the oblivion and what we have is mostly photos depicting that short stretch of time.”

—[Massimo](#)



source

keyword: COBOL reserved word (z/OS)

source-computer

keyword: COBOL reserved word (z/OS)

South Africa

29 December 2023: “South Africa institutes proceedings against the State of Israel before the International Court of Justice under the Genocide Convention and requests provisional measures” — [Ambassador Majed Bamy](#)



INTERNATIONAL COURT OF JUSTICE

Peace Palace, Carnegieplein 2, 2517 KJ The Hague, Netherlands

Tel.: +31 (0)70 302 2323 Fax: +31 (0)70 364 9928

[Website](#) [X](#) [YouTube](#) [LinkedIn](#)

Press Release

Unofficial

No. 2023/77

29 December 2023

The Republic of South Africa institutes proceedings against the State of Israel and requests the Court to indicate provisional measures

THE HAGUE, 29 December 2023. South Africa today filed an application instituting proceedings against Israel before the International Court of Justice (ICJ), the principal judicial organ of the United Nations, concerning alleged violations by Israel of its obligations under the Convention on the Prevention and Punishment of the Crime of Genocide (the “Genocide Convention”) in relation to Palestinians in the Gaza Strip.

According to the Application, “acts and omissions by Israel . . . are genocidal in character, as they are committed with the requisite specific intent . . . to destroy Palestinians in Gaza as a part of the broader Palestinian national, racial and ethnical group” and that “the conduct of Israel — through its State organs, State agents, and other persons and entities acting on its instructions or under its direction, control or influence — in relation to Palestinians in Gaza, is in violation of its obligations under the Genocide Convention”.

The Applicant further states that “Israel, since 7 October 2023 in particular, has failed to prevent genocide and has failed to prosecute the direct and public incitement to genocide” and that “Israel has engaged in, is engaging in and risks further engaging in genocidal acts against the Palestinian people in Gaza”.

South Africa seeks to found the Court’s jurisdiction on Article 36, paragraph 1, of the Statute of the Court and on Article IX of the Genocide Convention, to which both South Africa and Israel are parties.

The Application also contains a Request for the indication of provisional measures, pursuant to Article 41 of the Statute of the Court and Articles 73, 74 and 75 of the Rules of Court. The Applicant requests the Court to indicate provisional measures in order to “protect against further, severe and irreparable harm to the rights of the Palestinian people under the Genocide Convention” and “to ensure Israel’s compliance with its obligations under the Genocide Convention not to engage in genocide, and to prevent and to punish genocide”.

Pursuant to Article 74 of the Rules of Court, “[a] request for the indication of provisional measures shall have priority over all other cases”.

Southern Lights

22 December 2023: “The green light in this photo is the aurora australis — the Southern Lights — as seen over the National Science Foundation’s Amundsen-Scott South Pole Station in Antarctica. This eerie visual happens when charged particles blown off by the sun (the solar wind) are caught in the Earth’s magnetic field and travel along the field lines, colliding with molecules of oxygen and nitrogen in the atmosphere.” —CIA World Factbook (material that expires after 30 days)



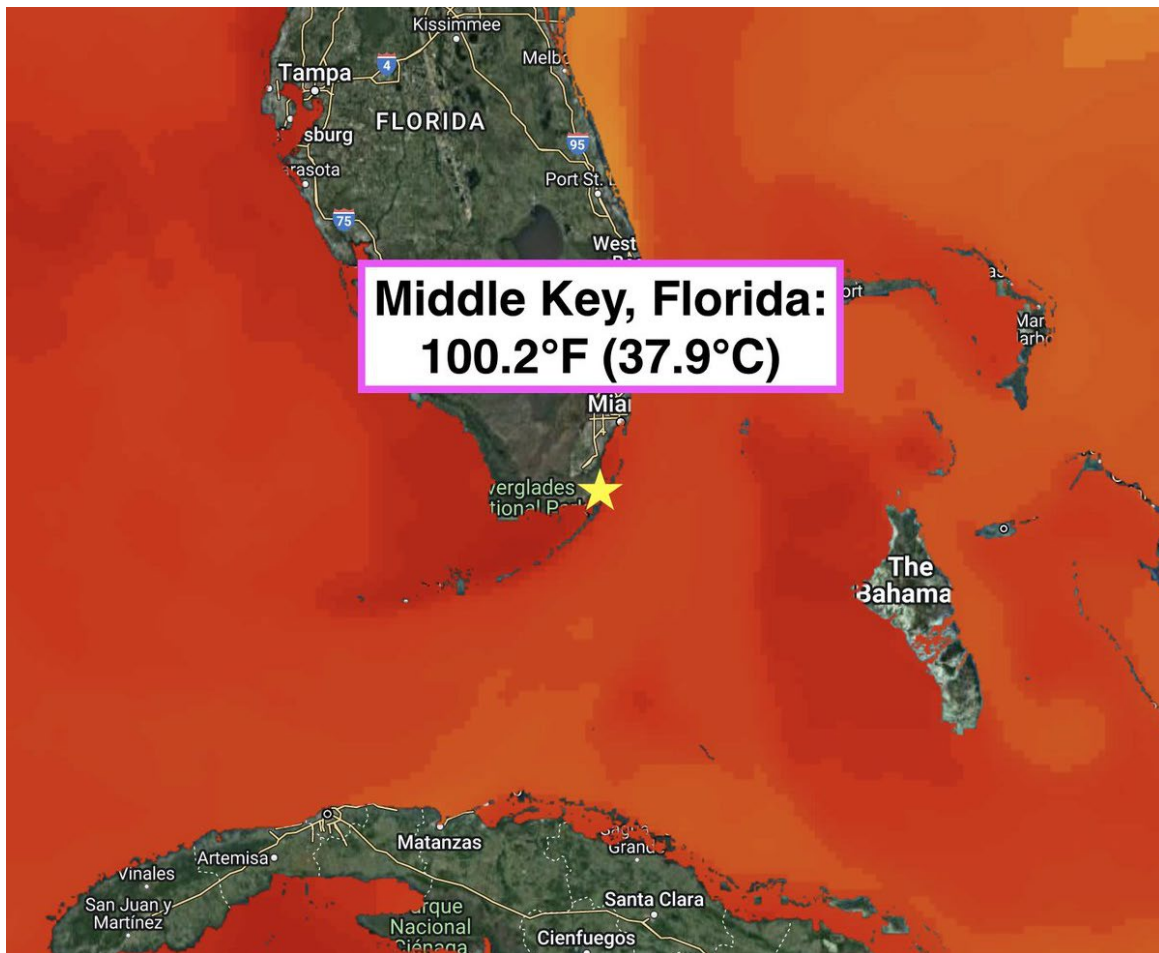
South Florida

11 August 2023: “South Florida has yet again recorded a sea surface temperature over 100°F as a severe marine heatwave continues to grip the region.

Severe coral bleaching is ongoing in the Florida Keys, with significant mortality reported on multiple reefs.

This water temperature was recorded in the shallow, murky, and dark waters of Florida Bay, which allows these waters to absorb more solar radiation.

While this 100°F reading is isolated, many buoys around Miami, Tampa Bay, and Key West have reported SSTs in the low-mid 90s.” —[Colin McCarthy](#)



space

keyword: COBOL reserved word (z/OS)

spaces

keyword: COBOL reserved word (z/OS)

SpaceX

24 August 2023: The Department of Justice is suing Elon Musk's SpaceX for refusing to hire refugees and asylum seekers.

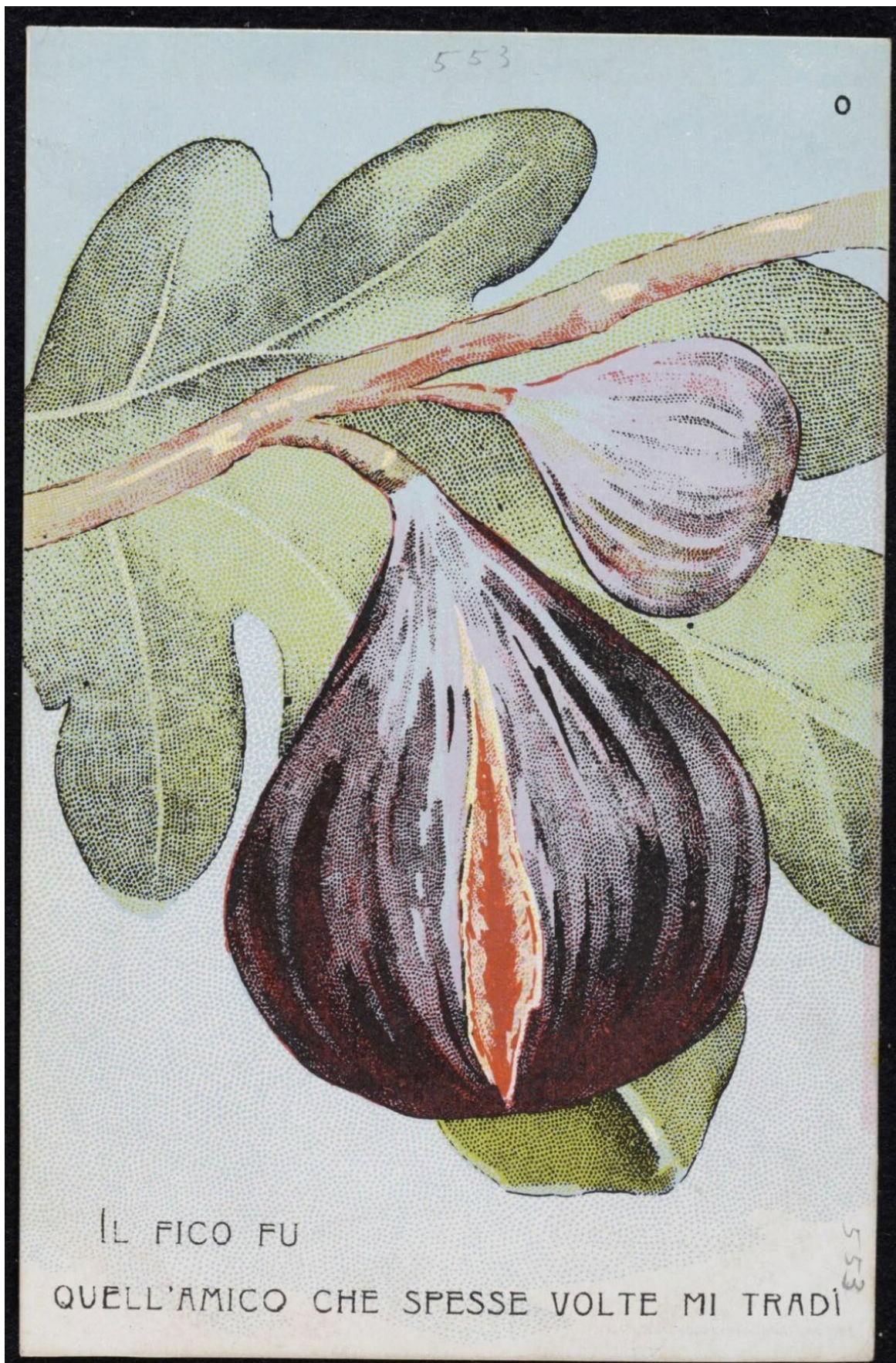
"The lawsuit alleges that, from at least September 2018 to May 2022, SpaceX routinely discouraged asylees and refugees from applying and refused to hire or

consider them, because of their citizenship status, in violation of the Immigration and Nationality Act.” —Department of Justice

“Our investigation found that SpaceX failed to fairly consider or hire asylees and refugees because of their citizenship status and imposed what amounted to a ban on their hire regardless of their qualification, in violation of federal law.” —US Assistant Attorney General Kristen Clarke

spade

“The expression “call a spade a spade” comes from the work of Plutarch, who originally wrote “call a fig a fig and a trough a trough.” Figs and troughs were crude slang for the Vulva, so what Plutarch meant was “call a cunt a cunt”. When Erasmus (1466-1536) translated Plutarch’s work & changed it to a garden spade to avoid embarrassment.” —[Whores of Yore](#)



Spain

24 July 2023: “BREAKING: It is so excruciatingly hot in Spain right now that palm trees are literally snapping in half. All living ecosystems are deeply threatened as the world races past the tipping point.” —[Steven Donziger](#)

special-names

keyword: COBOL reserved word (z/OS)

spectral analysis

5 December 2023: “Pro mastering tip
Use spectral analyzers that allow to see multiple spectrums (like in Pro Q-3) and compare frequency balance of your song to the reference
I use Voxengo Span Plus for that.” —[Nathaniel W.](#)

speech, freedom of

“Freedom of speech is a two way street, man. You have the right to say whatever you want and the Boss has a right to tell the police to arrest you.” —Lenny Bruce

See: herbs and spices

spoon

The word spoon comes from the Anglo-Sxon word *spon*, meaning splinter or wood chip.

Early spoons were carved from woord, bones, shell, stone, and other materials.

Spoons have been found from ancient Egypt and India, as well as Greek and Roman cultures.

SpringGreen

keyword: HTML color name



sprintf

function: C stdio.h library function: stands for String PRINT Function

See: [.sql](#) — file extension

sqr

function: C math.h library function: stands for SQuaRe of a number

sqrt

function: C math.h library function: stands for SQuare RooT

SR-71 Blackbird

“This is the cockpit of one of the most legendary planes ever built, the SR-71 Blackbird.

The Blackbird, created by Lockheed Martin’s Skunk Works division, was a revolutionary aircraft. Described by a former pilot as “107 feet of fire-breathing titanium,” the Blackbird’s groundbreaking construction made the spy plane unique among aircraft.” —[Massimo](#)



sra

keyword: VHDL reserved key word

srand

function: C library function: stands for Seeded RANdOm number

srl

keyword: VHDL reserved key word

sscanf

function: C stdio.h library function: stands for String SCAN input Function

standard

keyword: COBOL reserved word (z/OS)

standard-1

keyword: COBOL reserved word (z/OS)

standard-2

keyword: COBOL reserved word (z/OS)

Starbucks

5 August 2023: “Start telling the barista at SDtarbucks your name is Unionize so they have to shout out Unionize at work” — [Dark Warlord](#)

23 August 2023: “Starbucks could give every one of its 402,000 employees a \$4700 bonus check and still keep \$1,892,000,000 in net income this year. Instead they raised prices for no reason and are actively engaging in union busting. Get your coffee somewhere else.” — [Fuck You I Quit](#)

Starship rapid unscheduled disassembly

Elon Musk's SpaceX

Elon Musk's SpaceX Starship exploded after launch attempt, 20 April 2023, 8:33 a.m. CT from Boca Chica, Texas.



SpaceX claimed it didn't explode, but rather "As if the flight test was not exciting enough, [SpaceX] Starship experienced a **rapid unscheduled disassembly** before [the Super Heavy] stage separation."

The vehicle was unmanned.

Starship on track to launch in ~37 mins — [Elon Musk](#) at 5:50 am 20 Apr 2023

"Everything after clearing the tower was icing on the cake."

Video Transcript

- 5, 4, 3, 2--

[CROWD CHEERING]

[APPLAUSE]

- Zero post [INAUDIBLE] operations.

[APPLAUSE AND CHEERS]

Booster outdoor chamber pressures nominal.

- [INAUDIBLE] 33 seconds under the test point of the inaugural Starship vehicle. Tower cleared. [INAUDIBLE] over. The [INAUDIBLE] reports first stage engines nominal. What a sight from the ground. Cameras--

[RADIO CHATTER]

We're flying at twice the thrust of the Saturn V [INAUDIBLE].

[CROWD CHEERING]

[RADIO CHATTER]

We're throttled down and throttled back up. Going through the period of maximum aerodynamic pressure.

[INTERPOSING VOICES]

[APPLAUSE]

As the velocity increases, the depth of the atmosphere is decreasing.

[RADIO CHATTER]

Lessening stress on the vehicle. The [INAUDIBLE] out [INAUDIBLE] now.

[CHEERS AND APPLAUSE]

Continuing to watch the first stage as we head downrange.

[APPLAUSE]

100 seconds into flight. Our next major activity is going to be shutdown of the first stage. Houston tracking station now acquiring the vehicle. We're shut down. We will get separation of Starship and Super Heavy and ignition of the Starship engines. When Starship separates, we light up six engines in a staggered sequence. And if all goes well, those six engines will burn for almost 6 and 1/2 minutes. Onboard view from Starship.

[CHEERING]

And there's views of the Raptor engines on the second stage as we prepare for stage separation. Now after stage separation, the first stage will flip and begin a boost back maneuver for landing in the Gulf.

Continuing to fly 2 minutes, 40 seconds. Let's get ready for main engine cutoff.

Booster engine cutoff.

- Beginning to flip for stage separation.

[CHATTER]

- As of right now, we are awaiting stage separation where Starship should separate

from the Super Heavy booster.

- Yeah, Kate, right now it looks like we saw the start of the flip. But obviously, we're seeing from the ground cameras the entire Starship stack continuing to rotate. We should have had separation by now. Obviously, this is-- does not appear to be a nominal situation.

- Yeah, it does appear to be spinning. But I do want to remind everyone that everything after clearing the tower was icing on the cake.

[CROWD REACTS]

[APPLAUSE]

- Oh. There-- [LAUGHS] and there, as you saw, as we promised, an exciting end to the Starship inaugural integrated test flight.

“We were just happy to get it off the launch pad successfully,” wasn’t the originally stated goal, but I suppose when everything goes to shit, it’s nice to be able to gaslight people into accepting every failure as a purposeful genius move. —[Johnny Akzam](#)

We’re pretty good with synonyms, but “rapid unscheduled disassembly” is a new one, even for us. —[Dictionary.com](#)

The Federal Aviation Administration (FAA) stated “The FAA will oversee the mishap investigation of the Starship / Super Heavy test mission. A return to flight of the Starship / Super Heavy vehicle is based on the FAA determining that any system, process, or procedure related to the mishap does not affect public safety” and added this is “standard practice for all mishap investigations.”

SpaceX’s statement “At 8:33 a.m. CT, Starship successfully lifted off from the orbital launch pad for the first time. The vehicle cleared the pad and beach as Starship climbed to an apogee of ~39 km over the Gulf of Mexico Ð the highest of any Starship to-date. The vehicle experienced multiple engines out during the flight test, lost altitude, and began to tumble. The flight termination system was commanded on both the booster and ship. As is standard procedure, the pad and surrounding area was cleared well in advance of the test, and we expect the road and beach near the pad to remain closed until tomorrow.”

That Elon Musk rocket succeeded only in raining down rocket fuel on the Gulf Coast and yet the news stories still frame it as a partial success or a successful failure. So stupid —[Brett Chapman](#)

start

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (Oracle)

state or public building

noun “Any building or part of a building owned or leased by the state or local government in which state or public employees are regularly present for the purpose of performing their official duties (Penal Code Section 171b(c))” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

state sanctioned terrorism

12 October 2023: “With the blood of 30 million indigenous people, 55 million Africans and their descendants on its hands and a 400 year history of enslavement, rape, lynching, brutalization, dehumanization, and mass incarceration of Black people, American journalists should think carefully before calling any other nation the “number one sponsor of state sanctioned terrorism.” ” —[Bishop Talbert Swan](#)

static

keyword: C keyword: storage class

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

static mix

24 December 2023: “What’s a static mix?

+ 1 technique how to achieve a good static mix

Static mix is a rough mix that is done on the first step of mixing. It is done by using only level and pan.

The purpose of it is to set the balancing, to have a good understanding of what you going to work with, and hear all of the potential problems.

It is important to do it before reaching out to EQs and compressors, because you don't want to process sounds for no reason.

Only if it doesn’t sound right in a good static mix, then it gets fixed with further processing.

Technique to get a good static mix

1. Move all your faders (physically or in a DAW, doesn’t matter) all the way down
2. Start bringing your sounds up, one by one.
3. Usually I start with kick, bass, snare, rest of the drums. Then melody, from most important instruments to least important. Then vocals. From lead, to doubles, and then adlibs.

Sculpt your mix by yourself. When you hear everything together from the beginning, you will more likely miss something, distracted by all variety of sounds.”

—[nathaniel W.](#)

status

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows property

stdout

keyword: SQL reserved word (z/OS)

SteelBlue

keyword: HTML color name

SteelBlue

#4682B4

stereo

13 January 2024: “Making a sound to perceive from left and right sides simultaneously

You know that if anything sounds from L and R channels at the same time it perceives in the center

But how you can make anything to sound from left and right instead of the center? Very easy.

You should delay one of the channels (L or R).

Since we usually consume information left to right, I prefer to delay the right channel and it sounds more natural in my opinion.

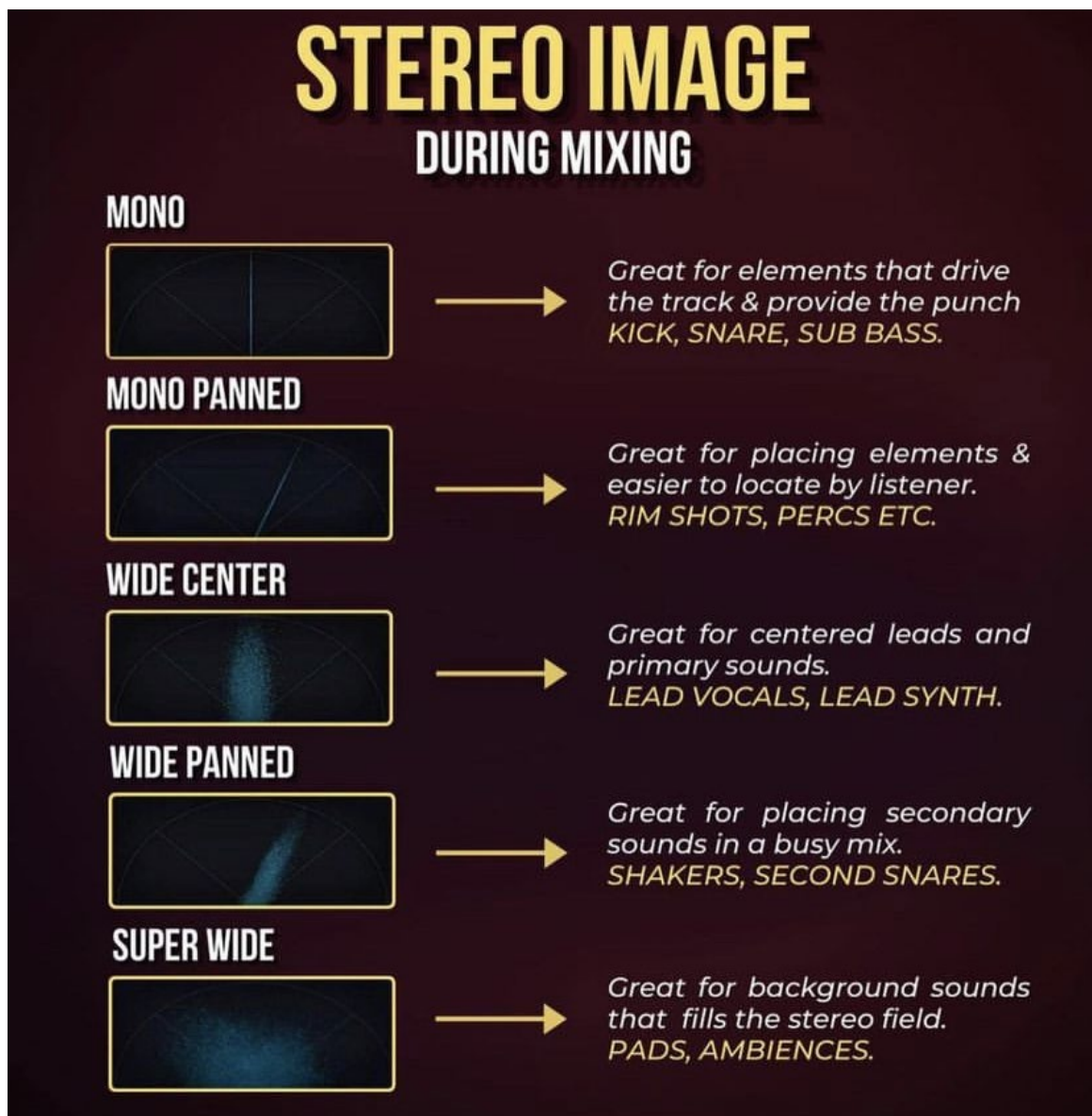
Use 15 to 40 ms delay on one of the channels. It is not enough for our brain to start thinking that these are different sounds. But it's enough to stop the element from sounding in the center and start sounding from left and right simultaneously.

I use SSL X-Phase plugin to do it. But basically it is achievable with stock plugins in most DAWs.” — [nathaniel W.](#)



stereo image

25 November 2023: “stereo image cheat sheet” — [Solar Heavy](#)



stereo to mono

1 December 2023: “Pro tip: When converting a stereo track to mono, sometimes L+L or R+R sounds better than the default L+R (because of phase inconsistencies). Kilohearts makes a free plugin called “Channel Mixer” that can do this if your DAW sucks.” — [Eduard](#)



stem-like cells

25 August 2023: “Stem-like CD8 T cells develop during periods of persistent antigen exposure. During chronic infection and cancer, therapies can stimulate their differentiation into antigen-specific cells with effector function; yet factors controlling the integrity of the stem-like T cell pool were unknown. Studying chronic viral infection in mice, Humblin *et al.* found that the co-stimulatory molecule CD28 regulated metabolism of stem-like CD8 T cells expressing the inhibitory receptor PD-1 to promote self-renewal and differentiation. In companion work, Gill *et al.* found that PD-1 blockade, while promoting effector cell differentiation, likewise stimulated the self-renewal of these stem-like CD8 T cells, maintaining the size and functionality of the progenitor pool. Thus, immune checkpoint therapies may rejuvenate immune responses without diminishing the durability of the stem-like CD8 T cells that respond to treatment.” —[Science Immunology](#)

stock buybacks

22 July 2023: “Prior to Reagan, stock buybacks, offshoring capital and tax havens were all illegal in the United States, it was even enforced, today these techniques are weaponized by the ruling class to steal trillions of dollars away from the general population each year.” —[MC Squared](#)

stop

keyword: COBOL reserved word (z/OS)

stove

Ben Franklin invented a metal lined fireplace in 1742. The design is now called the Franklin stove.

The first electric stove was invented by Thomas Ahearn in 1892.

Stove Top stuffing

Kraft Stove Top stuffing is banned in Japan, the United Kingdom, and several European nations because it contains beta-hydroxy acid (BHA) and butylated hydroxytoluene (BHT), which may be carcinogenic and impair blood clotting.

streat

function: C string.h library function: stands for STRing conCATenation

strcmp

function: C string.h library function: stands for STRing CoMPare

strcpy

function: C string.h library function: stands for STRingCoPY

stream ASCII file format

PDP-11 file format for plain text ASCII files

‘

Source files, such as MACRO-11 and FORTRAN IV programs, and text files that you create with an editor are in stream ASCII format. These files consist of a series of bytes, each byte representing an ASCII character. Stream ASCII files have no special headers or end blocks, nor do they include any formatted binary blocks.

—*RT-11 Volume and File Formats Manual:*

streaming payouts

Streaming payouts per stream, 2023:

platform	payout per stream
Napster	\$0.01900
Tidal	\$0.01250
Apple Music	\$0.00735
Google Play	\$0.00676
Deezer	\$0.00640
Spotify	\$0.00437
Amazon	\$0.00402
Pandora	\$0.00133
YouTube	\$0.00069

strictfp

keyword: Java reserved key word

strike

US Supreme Court: +-21-1449 Glacier Northwest, Inc. v. Teamsters (06/01/2023): On Thursday, 1 June 2023, the US Supreme Court ruled 8-1 that if workers go on strike and it costs the business money, the business can go to court and sue the workers for damages.

The one dissenting judge, Ketanmji Brown, stated: “Nor was the onus of protecting Glacier’s economic interests if a strike was called in the middle of the day on the drivers—it was, instead, on Glacier, which could have taken any number of prophylactic, mitigating measures. What Glacier seeks to do here is to shift the duty of protecting an employer’s property from damage or loss incident to a strike onto the striking workers, beyond what the Board has already permitted via the reasonable-precautions principle. In my view, doing that places a significant burden on the employees’ exercise of their statutory right to strike, unjustifiably undermining Congress’s intent. Workers are not indentured servants, bound to continue laboring until any planned work stoppage would be as painless as possible for their master. They are employees whose collective and peaceful decision to withhold their labor is protected by the NRLA even if economic injury results.”

“BREAKING: The Supreme Court has ruled in favor of a concrete company that wanted to sue a union because a strike cost them money. The 8-1 decision means the company, Glacier Northwest Inc., can sue the union over a strike where truck drivers left wet concrete in their trucks.” —[More Perfect Union](#)

“Look at the strikes going on right now. UPS escalating. Amazon. Hollywood SAGAFTRA strike. Both Democrats and Republicans are on the bosses side! How many have taken a stand with the workers being exploited?” —Cornel West

string

keyword: COBOL reserved word (z/OS)

keyword: String (initial cap) JavaScript object

strlen

function: C string.h library function: stands for STRing LENgth

strncmp

function: C string.h library function: stands for STRing up to Number COMpare

strncpy

function: C string.h library function: stands for STRing up to Number CoPY

struct

keyword: C keyword: data type

keyword: Objective-C reserved word

student debt

Regarding the student loan debt matter: The first free taxpayer-supported public school in North America, the Mather School, opened in Dorchester, Massachusetts, in 1639. By 1850, free public school rapidly started spreading across the US. Every state in the union had free public higher education from 1862 to 1969. Free public education was considered a basic human right until California Governor Ronald reagan decided that free public college was “welfare” for Black students. There never should have been tuition being charged at public schools. There never should have been a movement where experienced bankers tricked teenagers into serious long term financial obligations. Joe Biden should have never as a senator written the law that made it impossible to go into bankruptcy over student, medical, or credit card debt.

In my radical opinion every human being who is denied the right to student loan bankrutcy should be guaranteed the absolute right to a free mercy execution and Joe Biden should be required to personally kill everyone who applies for the mercy

execution, streamed live over the internet with every one of his 232 billionaire donors and the CEOs of every corporation that donated to Biden being required to appear on the stream after each execution and state “I paid money to support Joe Bidens campaign to murder poor people.”

“Because Congress has already appropriated the money for federal student loans—under the Federal Credit Reporting Act, the cost is fully realized upfront at the time of lending.” —[The Debt Collective](#)

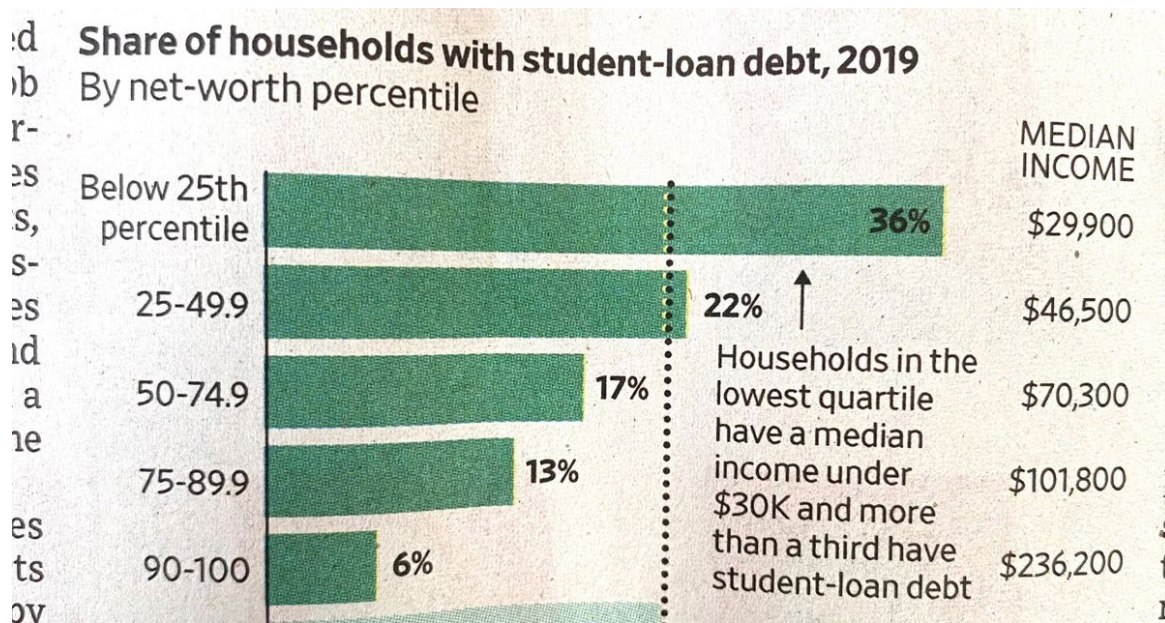
7 August 2023: “Good thing Covid is gone and he cured Cancer.” —[Pat Just Pat](#)



29 August 2023: “I don’t think I’ve ever seen a more disgracefully dishonest argument than the talking point that student loan forgiveness is a handout to the “privileged” or “elite”.

The people with debt are the ones without money, which should be obvious but

somehow has successfully been obscured.” —[Nathan J Robinson](#)



2 September 2023: “[regarding the headline:] Biden administration cancels \$72 million is student debt for more than 2,300 borrowers

Don’t be misled by the pro-Biden spin:

Biden canceling just 0.004% of student debt for only 0.005% of borrowers really means he’s still refusing to cancel the other 99.996% for the other 99.995%.

He doesn’t deserve positive PR for throwing pennies at a problem he helped create.” —[Holding Biden Accountable](#)

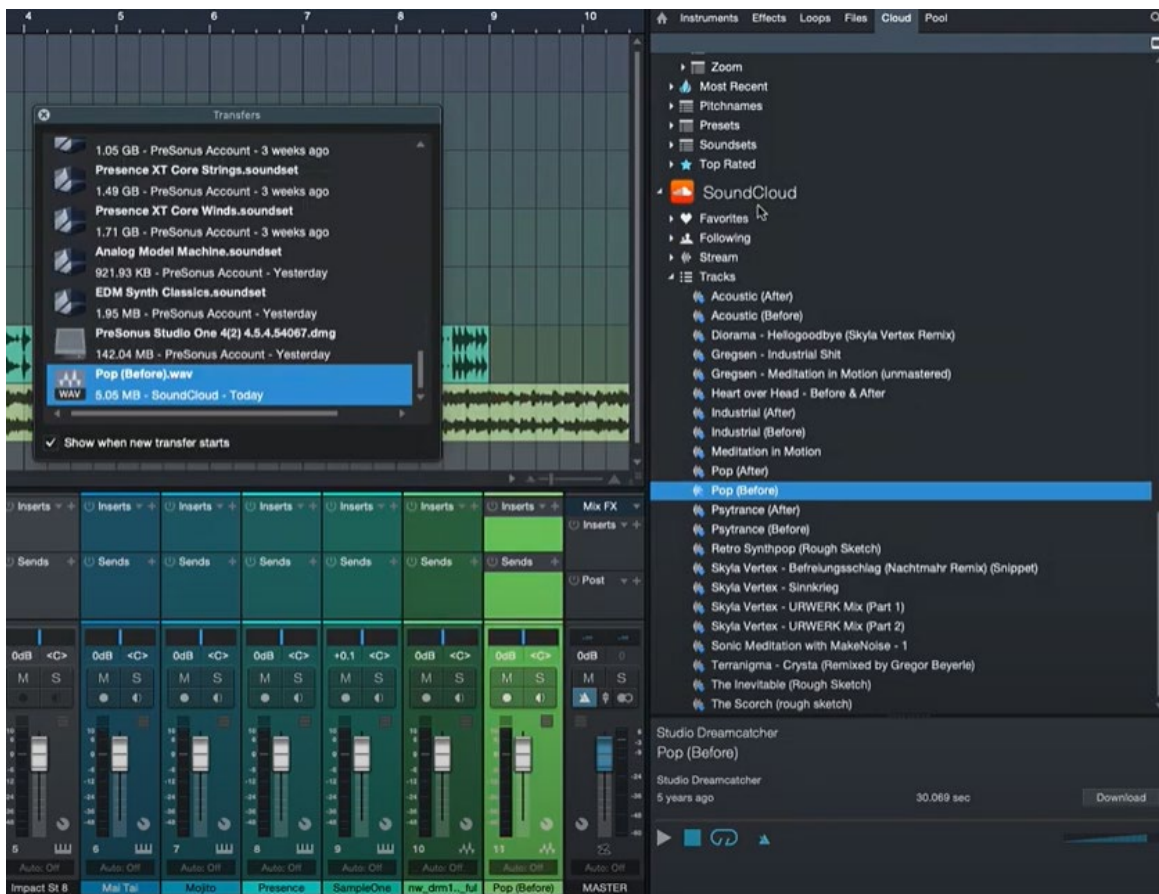
29 September 2023: “Education Department confirms student loans will restart even if the government closes. About 28 million borrowers will be expected to make a payment in October.” —US Department of Education

studio

“The studio is a musical instrument.” —Brian Eno

Studio One

11 January 2024: “a really cool feature with Studio One is being able to export your songs to Soundcloud but not only that you can import songs from your Soundcloud and other songs from people you follow for remixes or collabs” —[JUST!N](#)



subarray

keyword: SQL reserved word (z/OS)

nuclear submarines



18 March 2023: "Front page of the Sunday Age accidentally does the meme. According to war secretary Marles, Australia is spending hundreds of billions of dollars to protect our trade with China... from China.

Australian natsec journalism is just becoming one uninterrupted stream of accidental internet memes. Again, the only possible explanation for the completely irrational way that Australia is sacrificing its own economic and security interests by aiding in the US empire's encirclement of China is that Australia is more afraid of the US than of World War 3.

It's not something we're all necessarily consciously aware of, in the same way you don't necessarily think about how you'll do whatever it takes to stay on any bully's good side. But that's what's happening, and if we really think about it we see that it's undeniable.

If we're really honest with ourselves, we see it, and we can never unsee it. Australia

is not arming itself against China to protect itself from China. Australia is arming itself against China to protect itself from the United States.

That's the only possible explanation for the ridiculous, self-evidently contradictory nature of our policies on China. We're more afraid of the US than going to war with a nation who has nuclear warheads and the ability to completely flatline our economy."

—[Caitlin Johnstone](#)

submit

keyword: JavaScript windows method

sub-queue-1

keyword: COBOL reserved word (z/OS)

sub-queue-2

keyword: COBOL reserved word (z/OS)

sub-queue-3

keyword: COBOL reserved word (z/OS)

substring_mb

keyword: SQL reserved word (z/OS)

substring

keyword: SQL reserved word (z/OS)

subtract

keyword: COBOL reserved word (z/OS)

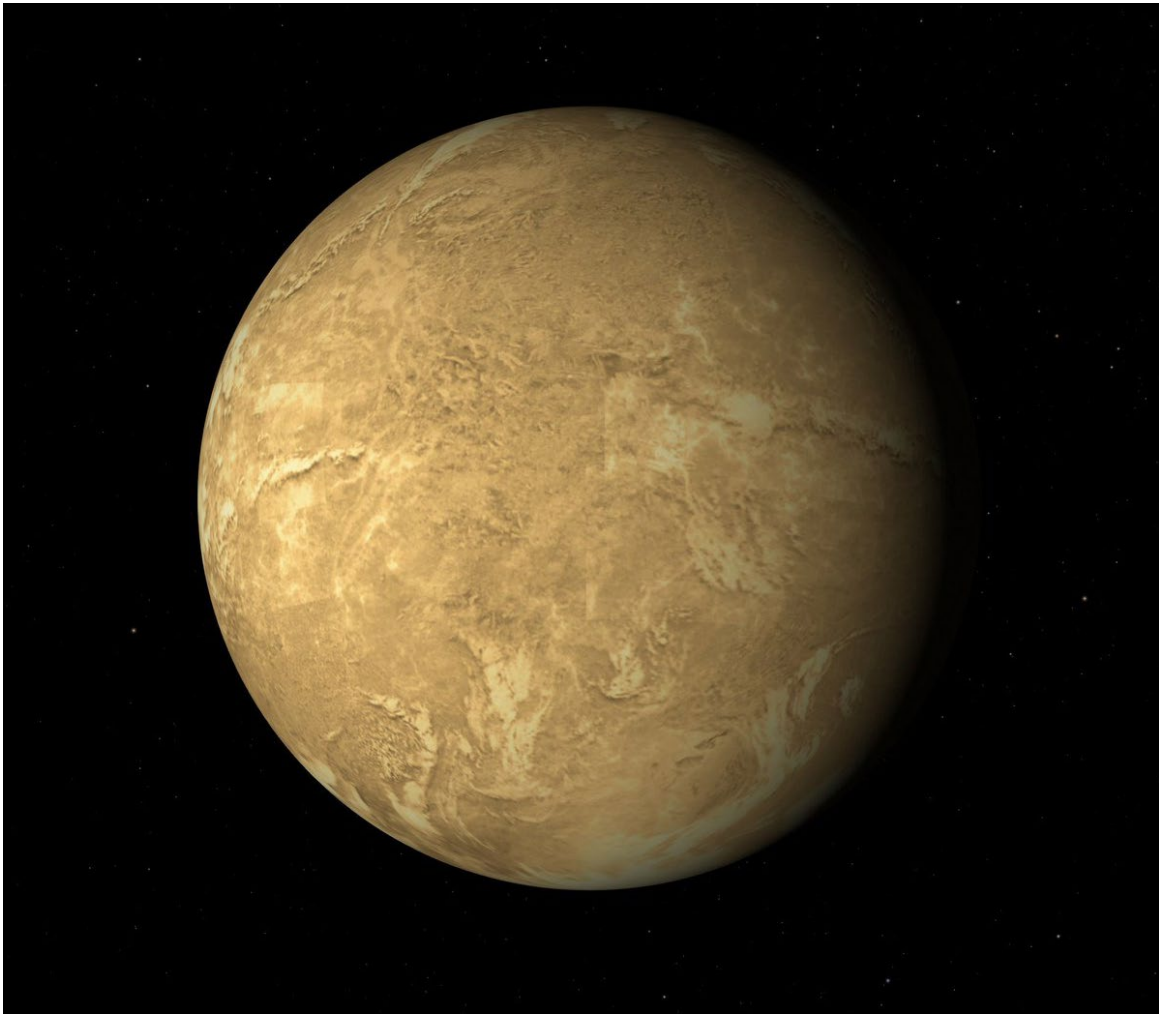
subtype

keyword: Ada reserved key word

keyword: VHDL reserved key word

subsurface oceans

13 December 2023: “A new study suggests 17 Earth-sized worlds could have subsurface liquid water oceans, with hydrothermal activity causing geyser-like eruptions through their icy shells. In Earth’s oceans, entire ecosystems thrive near hydrothermal vents, which provide energy and nutrients.” — [NASA Astrobiology](#)



successful

keyword: SQL reserved word (Oracle)

Sudan

nation

Sudan has more pyramids than any other nation, 255. Egypt is next with 138.

United States attacked Sudan in 1998.

20 August 1998: “On the 20th of August 1998, US President Bill Clinton ordered a cruise missile attack on Sudan’s Al Shifa factory, which produced 90% of the country's pharmaceuticals. Germany’s ambassador to Sudan at the time, Werner Daum, stated that the loss of the factory resulted in the deaths of tens of thousands

from treatable diseases.

The administration of President Bill Clinton justified the attacks, based on the grounds that the al-Shifa plant was involved with processing the deadly nerve agent VX, and had ties with the Islamist al-Qaeda group of Osama bin Laden.

These justifications for the bombing were disputed by the owners of the plant, the Sudanese government, and other governments.

American officials later acknowledged “that the evidence that prompted President Clinton to order the missile strike on the Shifa plant was not as solid as first portrayed.”

Officials later said that there was no proof that the plant had been manufacturing or storing nerve gas, as initially suspected by the Americans, or had been linked to Osama bin Laden, who was a resident of Khartoum in the 1980s.” —[Morbid Knowledge](#)

12 October 2023: “As the war in Sudan enters its 6th month, the official death toll is over 9000, (1200 children have died of measles + malnutrition), only 26% of the \$3 billion aid needed has been pledged, 420,000 Darfurian survivors of genocidal violence are stuck in Chad with little to no aid/support and yet Sudan has fallen out of the headlines and there are \$2 billion aid packages being crafted in US congress to fund a genocidal attack on Gaza.” —[Nisrin Elamin](#)

7 December 2023: “I have determined members of the Sudanese Armed Forces have committed war crimes and Rapid Support Forces have committed war crimes, crimes against humanity and ethnic cleansing in Sudan. We stand with the people of Sudan in their demands for peace and civilian, democratic rule.” —[Secretary of State Antony Blinken](#)

My note: this was said as the US funded genocide in Palestine entered its third month.

suicide

In the US, dial 9-8-8 for emergency suicide prevention. Do not discuss anything that might be a crime, because the government monitors and records the calls.

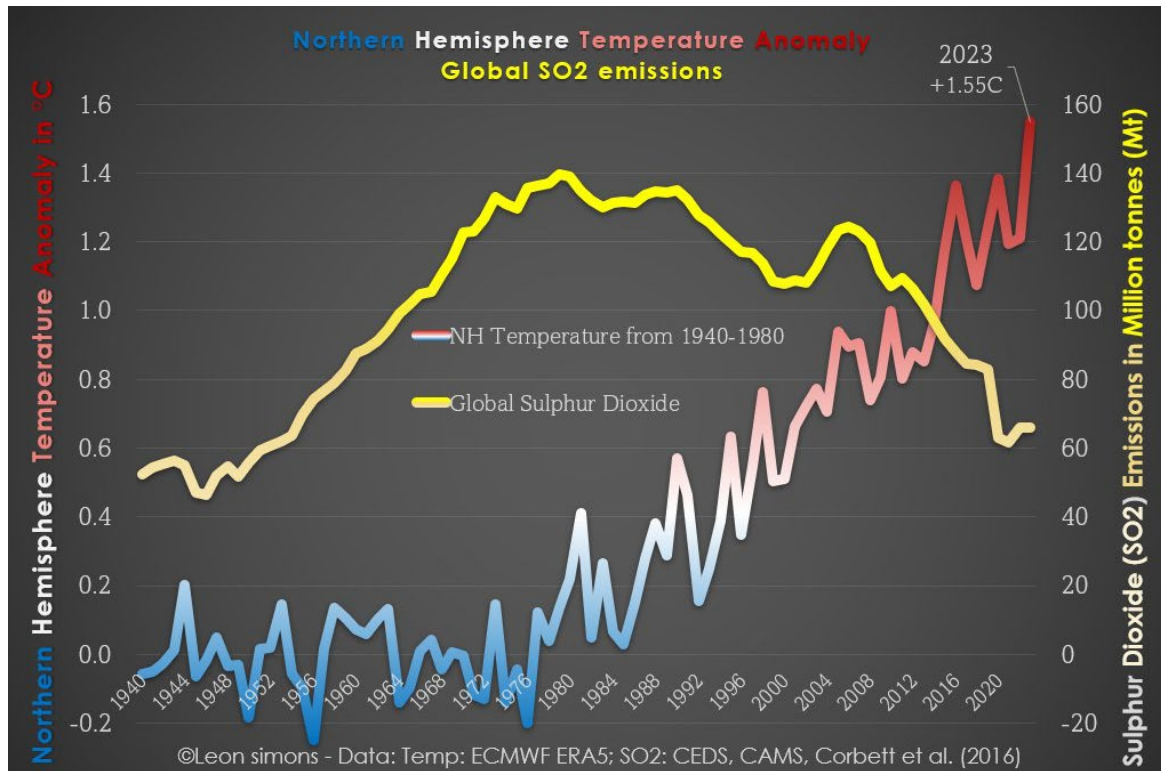
10 August 2023: “The number of people who died by suicide in the U.S. hit an estimated record 49,499 in 2022, a 2.6% increase over the estimated 48,183 in 2021. The groups with the highest rates of suicide were non-Hispanic American Indian/Alaska Native, Non-Hispanic White, and Non-Hispanic Native Hawai‘ian/other Pacific Islander.” —[Centers for Disease Control and Prevention \(CDC\)](#)

sulfur air pollution

8 January 2024: “Greenhouse gas warming of the Northern Hemisphere was masked by increasing sulphur air-polution for decades, until clean air regulations in the 80’s.

With rapid reductions in air pollution, warming is now accelerating.

We need to prepare for rapid changes to our weather.” —[Leon Simons](#)



sum

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

Sun

Our sun produces a wide range of light frequencies, with predominate frequency coming off the sun being approximately green. It looks yellow from inside the Earth’s atmosphere because the air filters out a lof of the blue light and the remaining mixture of frequencies looks yellow (becoming orange or red with more atsmosphere near

sunrise and sunset). From near earth orbit, the sun looks white because of the wide range of frequencies mixing together in our eyes.

The Sun is not on fire. Fire is a chemical reaction. The Sun has a nuclear reaction.

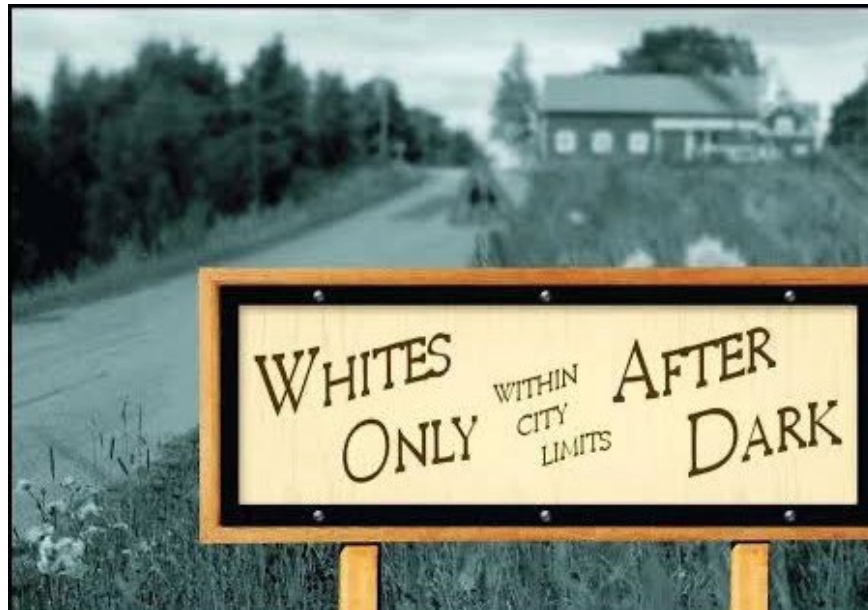
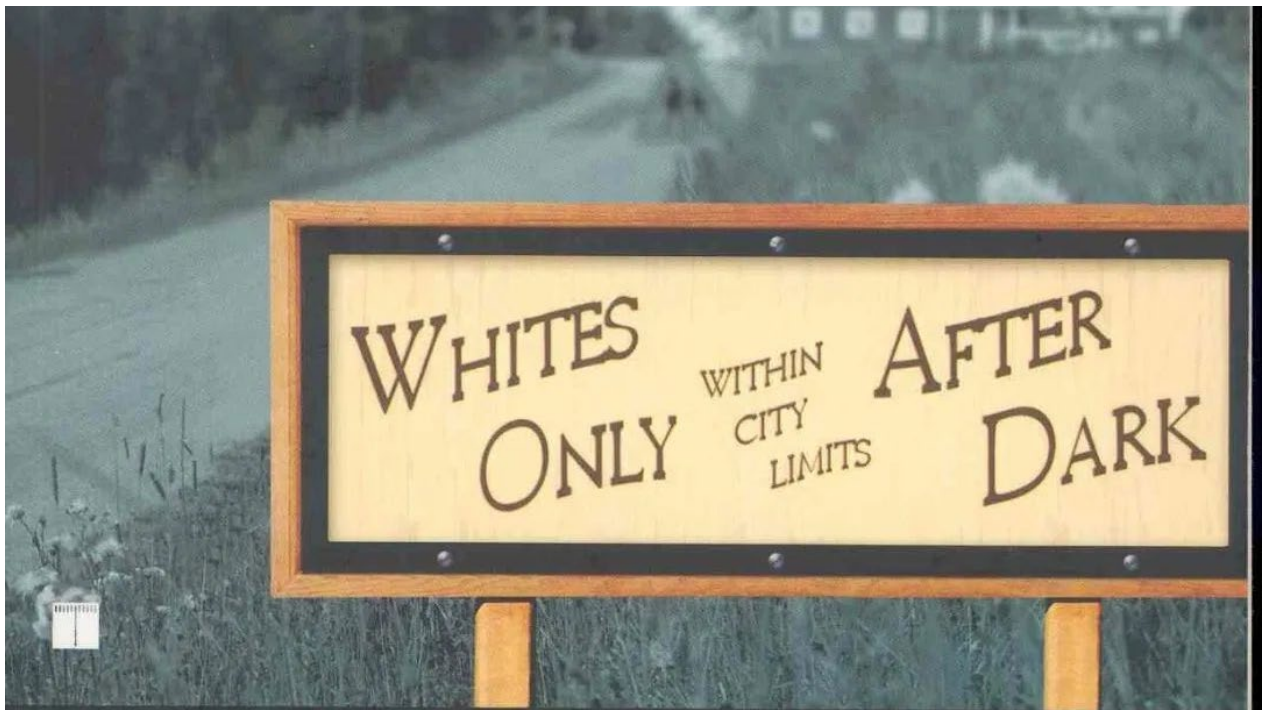
24 August 2023: “Plasma is constantly streaming away from the Sun, forming the solar wind. A likely source of this plasma is coronal holes, regions of the Sun’s corona with magnetic field lines that open outward. Chitta *et al.* observed a coronal hole in the extreme ultraviolet using the Solar Orbiter spacecraft and identified several types of small-scale jets within it (see the Perspective by Ugarte-Urra and Wang). Large numbers of jets occurred during the observation, but each one lasted only a few dozen seconds. The authors calculated that the jets provide enough energy and plasma to supply a large fraction of the solar wind, at least during quiet periods.” —[Science](#)

sunchokes

Sunchokes are generally considered safe for those with diabetes. Consult a physician or nutritionist for professional medical or dietary advice.

sundown towns

8 July 2023: “Sundown towns—also known as sunset towns, gray towns, or sundowner towns, were all-white municipalities or neighborhoods in the United States that practiced a form of racial segregation by excluding non-whites via some combination of discriminatory local laws, intimidation or violence. The term came into use because of signs that directed “colored people” to leave town by sundown.” —[Kenny Akers](#)



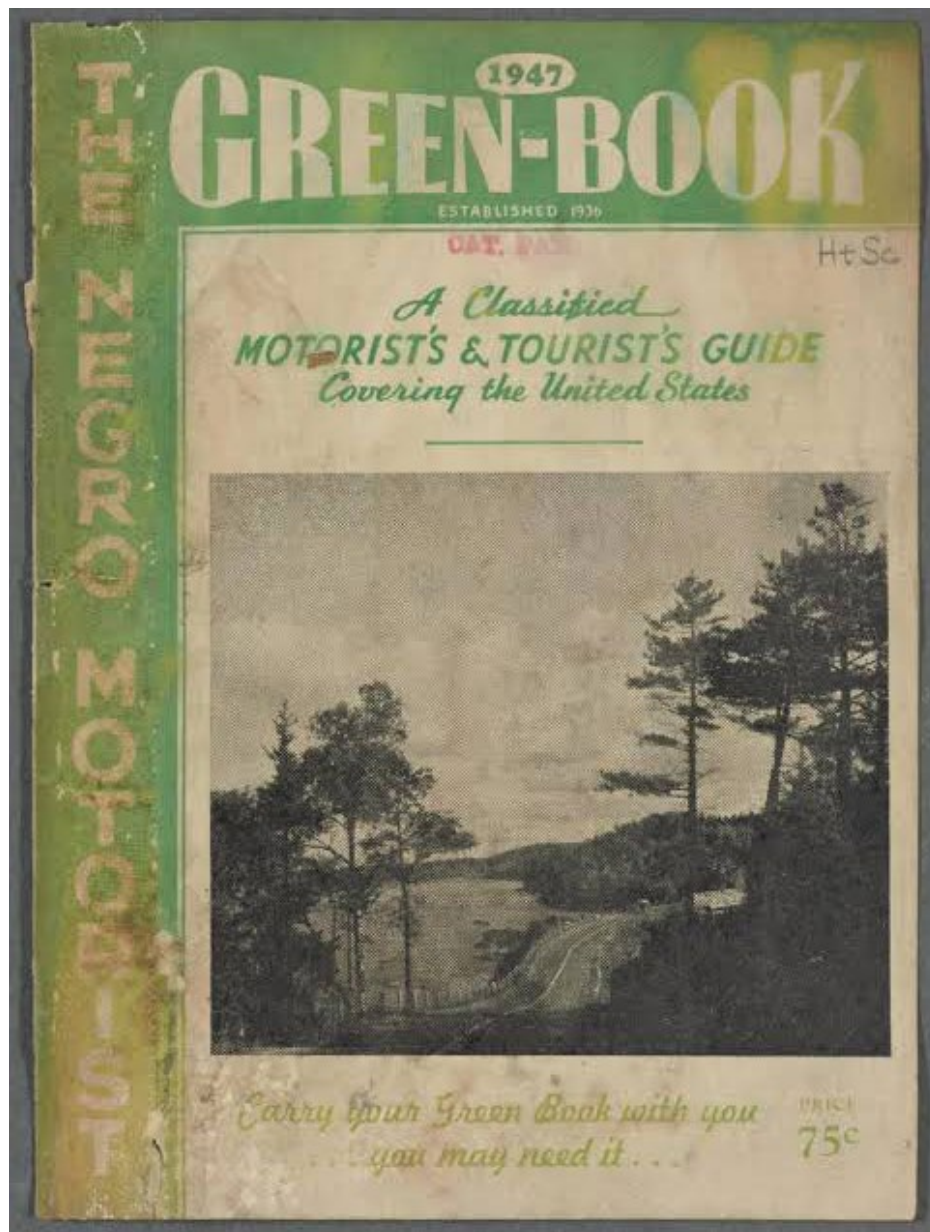
“A sundown or sunset town was a town, city, or neighborhood in the US that excluded non-whites after dark.

The term sundown came from the signs that were posted stating that people of color had to leave the town by sundown.” — [African Archives](#)



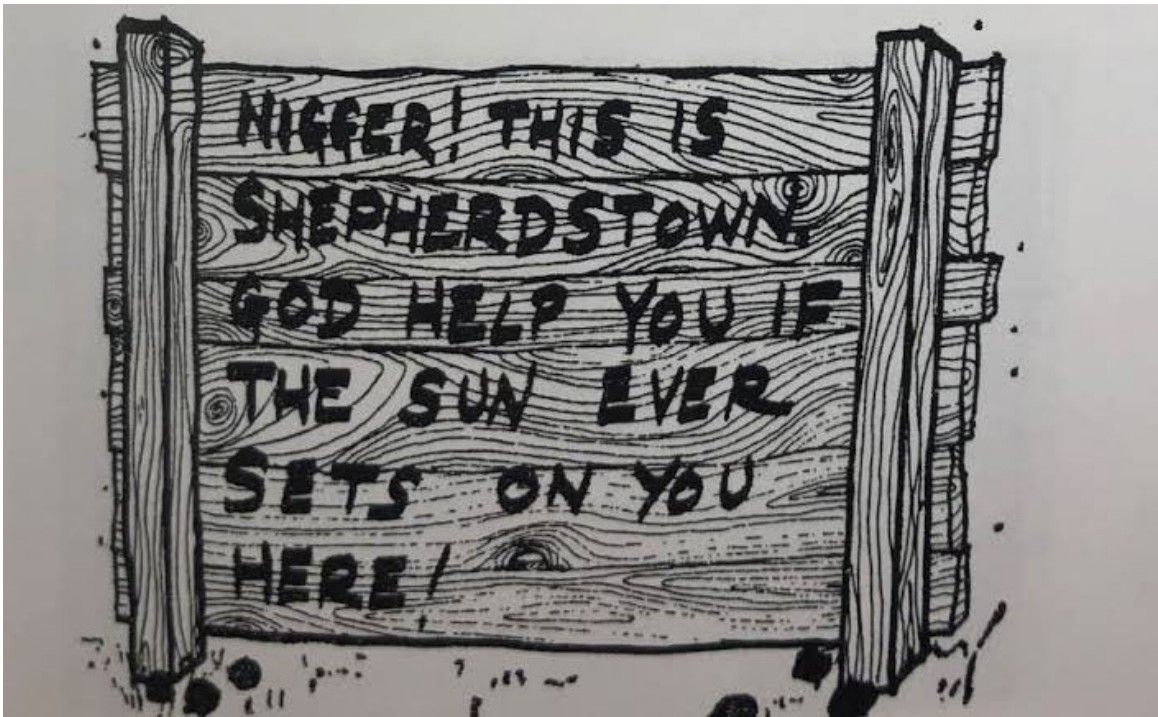
“In most cases, signs were placed at the town's borders which read: “Stranger/Negro, Don’t Let the Sun Set On You Here.” The exclusion was official town policy or through restrictive covenants agreed to by the real estate agents of the community.

The policy was usually enforced through intimidation. This intimidation could occur in a number of ways, including harassment by police officers or neighbors and in some circumstances violence.” —[African Archives](#)



“The phenomenon of sundown towns was the impetus for Harlem civil rights activist Victor Green to write the Negro Motorist Green Book, which detailed safe places for Black travelers to rest and eat without fear of harassment, threats or death.”

—[African Archives](#)



“With the 1968 Fair Housing Act, sundown towns became illegal (on paper). Many people are surprised to learn that some of the places they live, were once sundown towns. Contrary to popular belief, sundown towns were a Northern and not Southern phenomenon.” —[African Archives](#)

See: `.sup`

super

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Super (initial cap) Objective-C reserved word

keyword: Ruby reserved word

See: nutritional supplements

suppress

keyword: COBOL reserved word (z/OS)

Charu Suri

“Charu Suri consistently combines the Ragas of India with the Jazz of the US. Her newest tunes even have Steve Gadd and John Patitucci playing her Ragas. Phenomenal works with awesome talent behind them.” —[Kelly Kintner](#)


suspensions

Suspensions: Advanced Shibari techniques that involve suspending the bound person off the ground. There are multiple forms of suspensions, depending on the point of anchor and position.

See also: **shibari**

Susa

Susa, Iran, is about 6,200 years old.

See: **.svg**  — file extension

See: **.svgz** — file extension

Swap


directory:

Virtual memory directory on a hard drive. Allows the memory manager to swap some data and program segments to hard drive to expand the amount of memory available beyond the limits of

physical memory.

SWAT team

11 August 2023: “When the swat team arrives, don’t go outside. Lie face down on the floor with your arms straight out and wait.” —[Robert Davenport](#)

See: .swf  — file extension

switch

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

switchbladeknife

noun “A knife with the appearance of a pocketknife and with a blade two or more inches long which can be released automatically by the weight of the blade or by any other mechanism or manner (Penal Code Section 17235)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

symbolic

keyword: COBOL reserved word (z/OS)

SymbOS

operating system

Proprietary OS by Amstrad

sync

keyword: COBOL reserved word (z/OS)

synchronized

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: Java reserved key word

keyword: JavaScript reserved word

syndicracy

“SYNDICRACY — Government by a body of syndics, each representing some business interest.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

synonym

keyword: SQL reserved word (Oracle)

See: @synthesize — OBJECTIVE C

Syria

nation

United States supports terrorists to overthrow the Syrian president Bashar al-Asad 1998.

United States bombs Syria 2018.

1 September 2023: “ ‘Bashar out!’: Protests in southern Syria over economy now target president

Hundreds of people demonstrate in Sweida and Daraa provinces after the currency plunges to 15,500 pounds to the US dollar.” —[Aljazeera](#)

12 October 2023: Israel launched missile strikes against Syria’s two main airports in Damascus and Aleppo, knocking out service in both..

sysdate

keyword: SQL reserved word (Oracle)

T t

T

ASCII: 54 hex

UNICODE: LATIN CAPITAL LETTER T

t

ASCII: 74 hex

UNICODE: LATIN SMALL LETTER T

table

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

tag editors

This is a short discussion on the subject of MP3 tags and tag editors.

The unofficial (but widely supported) system is ID3 (this was originally MP3 specific).

The original version was 128 bytes long.

30 bytes each for the title, artist, album, and a "comment", 4 bytes for the year, and

1 byte to identify the genre of the song from a predefined list of values

Later the ability to store track number on an album was added.

Then most of the fields were expanded from max of 30 characters to max of 60.

Then an optional frame system (now up to 83), where each frame can be as 16MB with a max of all frames being 256MB.

The most recent features include two different lyrics standards so that you can store your entire lyrics with the song and a chapters standard where you can synchronize a slide show of images and titles with an audio podcast.

The vast majority of MP3 players will allow you to create the early standard tags.

Some MP3 players and audio programs will allow you to use more of the tag features.

There are dedicated programs called "tag editors" that cover all the features.

Many of the tag editors are free.

tagged

keyword: Ada reserved key word

taint

keyword: JavaScript windows depreciated function

Taiwan

Taiwan's Minister of Foreign Affairs, Joseph Wu, told the Legislative Yuan on 25 May 2023, "Taipei and Washington are engaged in talks on the matter" in reference to the possibility of Taiwan being brought under the US "nuclear umbrella".

Currently Australian, Japan, New Zealand, South Korea, and the NATO nations are under the US "nuclear umbrella", which is the obligation for the US to use nuclear

weapons if any of those nations are attacked.

28 July 2023: US sends \$345 million in weapons to Taiwan.

Taiwan Semiconductor

3 Aug 2023: “Member when I tolja about the new Taiwan Semiconductor factory in AZ?

Basically the company got hundreds of millions of dollars because JOBS and stuff.

Well the company that got all that tax money just fired all the union workers and flew in over 1000 workers from Taiwan.

Huh” —[Robert Davenport](#)

takate kote

Takate Kote: Another term for the Gote Shibari or box tie.

See also: [shibari](#)

tally

keyword: COBOL reserved word (z/OS)

tallying

keyword: COBOL reserved word (z/OS)

tampering

noun “An intentional but unauthorized act resulting in the modification of a system, components of systems, its intended behavior, or data.” [from Committee on National Security Systems (CNSS) Glossary, CNSSI No. 4009, US federal government; Source: DHS,

Information Technology Sector Baseline Risk Assessment (adapted)]

Tan

keyword: HTML color name



tan

function: C math.h library function: stands for TANgent

tanh

function: C math.h library function: stands for TANgent Hyperbolic

tape

keyword: COBOL reserved word (z/OS)

tape machines

17 January 2024: “Get more body for your kick

Sometimes your kick may have a punch but it’s too thin. How to make this kick sound more “ fat” and “ heavy °?

A great decision would be to use tape emulation device. Analog tapes tend to smoothly round off the transients, leaving the body of your sounds.

You can use this trick to smooth out your other sharp sounds as well.

I use UAD Studer A800 for that.” —[Nathaniel W.](#)



See: .tar — file extension

See: .tar.gz — file extension

tarot





19th century: “Unidentified Artist, Playing Card: Virgo (Trump XXV), 19th century” — [Harvard Museums](#)

task

keyword: Ada reserved key word

See: taurine

Taweret

14 January 2024: “Here’s a gorgeous 2600 year old greywacke sculpture of the goddess Taweret (‘She-Who-Is-Great’) dedicated by the High Steward Pabasa & snapped @EgyptianMuseumC last month. You’re welcome” — [Dr Campbell Price](#)



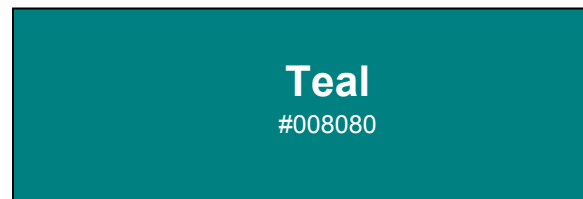
tax havens

22 July 2023: “Prior to Reagan, stock buybacks, offshoring capital and tax havens were all illegal in the United States, it was even enforced, today these techniques are weaponized by the ruling class to steal trillions of dollars away from the general population each year.” —[MC Squared](#)

See: tea

Teal

keyword: HTML color name



tear gas

noun “All liquid, gaseous, or solid substances intended to produce temporary physical discomfort or permanent injury by being vaporized or otherwise dispersed in the air (Penal Code Section 17240)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

tear gas weapon

noun “Any shell, cartridge, bomb, or device capable of being discharged or exploded which allows the release of tear gas(Penal Code Section 17250)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

tech comapnies

“How old are tech companies (2023)?

TikTok: **7**
 OpenAI: **8**
 Snapchat: **12**
 Instagram: **13**
 Uber: **14**
 Twitter: **17**
 Facebook: **19**
 Tesla: **20**
 Google: **25**
 Mozilla: **25**
 Netflix: **27**
 Amazon: **29**
 Cisco: **39**
 Oracle: **46**
 Apple: **47**
 Microsoft: **48**
 SAP: **51**
 Intel: **55**
 HP: **84**
 IBM: **112**
 Nintendo: **134**” —[Massimo](#)

Temporary Assistance for Needy Families (TANF)

On 17 May 2023 U.S. President Joe Biden met with House Speaker Kevin McCarthy and proposed imposing stronger work requirements on recipients of Temporary Assistance for Needy Families (TANF).

Joe Biuden was one of 78 senators who voted for then-President Bull Clinton's 1996 "welfare reform package". The law eliminated the U.S.'s main welfare program and replaced it with Temporary Assistance for Needy Families (TANF), requiring states to force a designated percentage of those receiving cash aid to participate in work-related activities.

[Rollcall Vote No. 262 Leg.]

YEAS—78

Abraham
 Ashcroft
 Baucus

Ford
 Frahm
 Frist

Lott
 Lugar
 Mack

Bennett

Biden

Bond

Breaux

Brown

Bryan

Burns

Byrd

Campbell

Chafee

Coats

Cochran

Cohen

Conrad

Coverdell

Craig

D'Amato

DeWine

Domenici

Dorgan

Exon

Faircloth

Feingold

Gorton

Graham

Gramm

Grams

Grassley

Gregg

Harkin

Hatch

Hatfield

Heflin

Helms

Hollings

Hutchison

Inhofe

Jeffords

Johnston

Kassebaum

Kempthorne

Kerry

Kohl

Kyl

Levin

Lieberman

McCain

McConnell

Mikulski

Murkowski

Nickles

Nunn

Pressler

Reid

Robb

Rockefeller

Roth

Santorum

Shelby

Simpson

Smith

Snowe

Specter

Stevens

Thomas

Thompson

Thurmond

Warner

Wyden

NAYS—21

Akaka

Bingaman

Boxer

Bradley

Bumpers

Daschle

Dodd

Feinstein

Glenn

Inouye

Kennedy

Kerrey

Lautenberg

Leahy

Moseley-Braun

Moynihan

Murray

Pell

Sarbanes

Simon

Wellstone

NOT VOTING—1

Pryor

About 540,000 families, including about 975,00 children, who received TANF were subjected to work requirements in 2021, according to the Center on Budget and Policy Priorities.

Able-bodied adults without dependents who are between ages 18 and 49 can only receive SNAP (food stamps) for three months out of every three years unless they work or participate in other government approved activities for at least 20 hours a week.

TENEX

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

an ancestor of TOPS-20 from BBN, for the PDP-10 — [Wikipedia: List of operating systems](#)

Tenochtitlan

“I wish I could be more excited for this but man, did they make (what I assume to be) Tenochtitlan ugly as hell. Spaniards unanimously described it as one of the most beautiful cities in the world. Incredibly clean and filled with color.” — [Trey the Expainer](#)



“The upcoming video game *Ecumene Aztec* depicts Tenochtitlan as a colorless and

primitive place. The *Eternals* movie, and TV show *Hernan*, are recent examples of perpetuating that terrible media myth. Here's a comparison of that TV series' Tenochtitlan with our webcomic series.” —[Aztec Empire](#)



“Call me crazy but making an entire game about surviving genocide doesn’t sound very fun at all. Why does ethnic cleansing of Indigenous people need to be marketed to a predominantly non-Native audience as ENTERTAINMENT?” —[Ali Nahdee](#)

teppo shibari

Teppo Shibari (Rifle Tie): A tie where one arm is stretched upward and the other one downward, reminiscent of carrying a rifle on one’s back.

See also: [shibari](#)

terminal

keyword: COBOL reserved word (z/OS)

terminate

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

test

keyword: COBOL reserved word (z/OS)

testing

“It seems the Biden administration is taking the former president's advice ‘if we stop testing [for COVID] right now, we'd have very few cases,actually’.” —Stephanie Voltolin, May 2023

text

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows property

See:  .tga — file extension

Thacker Pass Lithium Mine

12 May 2023: Tipi erected at PeeHee Mu’huh (Thacker Pass). Indigenous land defenders have formed @oxsamcamp opposing lithium mining operation on unceded traditional Paiute and Shoshone territory.

“Keeping watch @OxSamCamp holding ceremonial grounds for 2 weeks against extractive giant #LithiumNevada proposed largest lithium mine in the USA! but not without the consent of Paiute Shoshone grandmothers descended from Ox Sam -of 3 survivors of an 1865 massacre- #LandDefense” —[Chase Iron Eyes](#)



May 2023

than

keyword: COBOL reserved word (z/OS)

that

part of speech: conjunction, preposition, pronoun

Oxford English Corpus (OEC) rank: #8

Corpus of Contemporary American English (COCA): #12, #27, #903

Dolch level: Primer

Polysemy: 17

the

part of speech: article

Oxford English Corpus (OEC) rank: #1

Corpus of Contemporary American English (COCA): #1

Dolch level: Pre-primer

Polysemy: 12

“The” is a definite article in the English language that is used to specify or point to a particular noun or group of nouns. It is the most commonly used word in the English language. “The” is used to refer to something that is already known or has been previously mentioned in the conversation or text. It is used before singular and plural nouns, as well as before both countable and uncountable nouns. Additionally, “the” is used to indicate that the noun it modifies is unique or specific in some way. [ChatGPT]

See: theanine

Thebes

Thebes, Greece, is about 3,400 years old.

theft

16 December 2023: “Governor Newsom just passed a nearly \$300 million budget to combat “organized retail theft.”

Since then: Retailers are admitting they lied about the extent of retail theft. And FBI data just released tells us retail theft is down & property crime is *lowest since 1961.*

Lies.” —[SDcott Hechinger](#)

then

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: Ruby reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

theocracy

“THEOCRACY — Government by god-rule, that is, rule by the direct representative of the god.” —Gary Gygax, *Dungeon Masters Guide*, AD&D edition 1, 1979, page 89

thermodynamics

“Thermodynamics First Law: This equation states that the internal energy of a system (dU) is equal to the heat added to the system (dQ) minus the work done by the system (dW). It implies that energy cannot be created or destroyed, only transformed.” —[Science Simplified](#)

thigh tie

Futomomo (Thigh Tie): This binds the leg, turning it back on itself, making it immobile.

See also: shibari

third party

Abraham Lincoln was a member of the third party (Republican Party, the two main parties being the Democrats and the Whigs) and his party had only been in existence for five years.

John Quincy Adams was from the third largest of four major factions in the only national party that existed at the time.

Teddy Roosevelt, John C. Breckinridge, and Horace Greeley all came in second, ahead of one of the two major parties.

Ross Perot did so well in his first run for president that the Democrats and Republicans agreed to lock out all third party candidates from the national presidential debates. The League of Women Voters had run the presidential debates, but refused to participate in the censorship demanded by the two major parties.

this

keyword: Java reserved key word

keyword: JavaScript reserved word

Thistle

keyword: HTML color name



See: `.thm` — file extension

Thor

Thor is a Norse God.

Henry David Thoreau

“It is never too late to give up your prejudices.” —*Walden, or, A Life in the Woods*, Henry David Thoreau

threatening manner

noun “Any action that would cause a reasonable person apprehension or fear of bodily harm” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

See: **threonine**

through

keyword: COBOL reserved word (z/OS)

throw

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

See: **@throw — OBJECTIVE C**


throws

keyword: Java reserved key word

keyword: JavaScript reserved word

thru

keyword: COBOL reserved word (z/OS)

See: .tif  — file extension

See: .tiff  — file extension

time

“Time is the continued sequence of existence and events that occurs in an apparently irreversible succession from the past, through the present, into the future. It is a component quantity of various measurements used to sequence events, to compare the duration of events or the intervals between them, and to quantify rates of change of quantities in material reality or in the conscious experience. Time is often referred to as a fourth dimension, along with three spatial dimensions.” — [Wikipedia](#)

time

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

times

keyword: COBOL reserved word (z/OS)

timestamp

keyword: SQL reserved word (z/OS)

timesten

keyword: SQL reserved word (z/OS)

Timket

“The biggest festival in Ethiopia, Timket, is a three-day annual festival that honours the baptism of Jesus Christ in the river Jordan. It's one of the world's largest festivals that takes place annually. The festival attracts millions of people from all over the world.” —[Typical African](#)

Titan

Rob McCallum, co-founder of EYOS Expeditions (which transported tourists to the Titanic using Soviet submarines), told [Ben Taub of the New Yorker](#) about the legality of OceanGate's submersible: “Stockton strategically structured everything to be out of U.S. jurisdiction” for its Titanic pursuits, the former senior OceanGate employee told me. “It was deliberate.” In a legal filing, the company reported that the submersible was “being developed and assembled in Washington, but will be owned by a Bahamian entity, will be registered in the Bahamas and will operate exclusively outside the territorial waters of the United States.” Although it is illegal to transport passengers in an unclassified, experimental submersible, “under U.S. regulations, you can kill crew,” McCallum told me. “You do get in a little bit of trouble, in the eyes of the law. But, if you kill a passenger, you're in big trouble. And so everyone was classified as a ‘mission specialist.’ There were no passengers—the word ‘passenger’ was never used.” No one bought tickets; they contributed an amount of money set by Rush to one of OceanGate's entities, to fund their own missions. “It is truly hard to imagine the discernment it took for Stockton to string together each of the links in the chain,” Patrick noted. “ ‘How do I avoid liability in Washington State? How do I avoid liability with an offshore corporate structure? How do I keep the U.S. Coast Guard from breathing down my neck?’ ”

title

keyword: COBOL reserved word (z/OS)

See: .tmp — file extension

to

part of speech: preposition

Oxford English Corpus (OEC) rank: #3

Corpus of Contemporary American English (COCA): #7, #9

Dolch level: Pre-primer

Polysemy: 17

The word “to” has multiple meanings and can serve different grammatical functions depending on its context. Here are some common definitions and uses of the word “to”: [ChatGPT]

1. **Preposition:** “To” is often used as a preposition to indicate direction, movement, or location. For example: [ChatGPT]
 - “She walked to the store.” [ChatGPT]
 - “The cat jumped from the table to the chair.” [ChatGPT]
 - “He traveled from New York to Los Angeles.” [ChatGPT]
2. **Infinitive marker:** “To” is used before the base form of a verb to form the infinitive. For example: [ChatGPT]
 - “I want to go for a walk.” [ChatGPT]
 - “She loves to sing.” [ChatGPT]
 - “He decided to take a break.” [ChatGPT]
3. **Part of an infinitive phrase:** “To” is also used as part of an infinitive phrase, where it functions as a marker for the infinitive verb. For example: [ChatGPT]
 - “She is eager to learn.” [ChatGPT]
 - “He made an effort to help.” [ChatGPT]
4. **Indicating purpose or intention:** “To” can be used to express the purpose or intention of an action. For example: [ChatGPT]
 - “I went to the grocery store to buy some milk.” [ChatGPT]
 - “He took the umbrella to stay dry.” [ChatGPT]
5. **Indicating a range or limit:** “To” can indicate a range or limit when used with numbers or quantities. For example: [ChatGPT]
 - “The temperature ranges from 20 to 30 degrees Celsius.” [ChatGPT]
 - “He scored 85 to 90 percent in the exam.” [ChatGPT]
6. **Inflection of the verb “to be”:** In some cases, “to” is used as an inflection of the verb “to be” in certain dialects, such as African American Vernacular English (AAVE). For example: [ChatGPT]
 - “She be going to the party.” [ChatGPT]

It’s important to note that the context in which “to” is used can determine its specific meaning and function. [ChatGPT]

keyword: COBOL reserved word (z/OS)


keyword: SQL reserved word (ANSI, Oracle, z/OS)

keyword: VHDL reserved key word

See: `.toast` — file extension

toast

The origin of “raising a toast” is the Roman practice of dropping a piece of toast into wine for good luck.

See: `.tod`  — file extension

tolower

function: C string.h library function: stands for convert TO LOWERcase

Leo Tolstoy

“Freethinkers are those who are willing to use their minds without prejudice and without fearing to understand things that clash with their own customs, privileges, or beliefs. This state of mind is not common, but it is essential for right thinking.” —Leo Tolstoy

Tomato

keyword: HTML color name

Tomato

#FF6347

Tombili

“Tombili (Turkish for the word chubby) was a cat who lived in Istanbul, Turkey.

Tombili would sit on the steps shown in the image above and look at passersby, which gained considerable interest from people on the internet and quickly became an online sensation.

Sadly, Tombili died in August 2016 due to a severe illness, but a statue was placed in her honor. A month after it was revealed, the figure was stolen but was returned shortly afterward.” —[Fascinating](#)



toothbrush

Do not cover a toothbrush or store it in a closed container.

Dry a toothbrush after use. Some people will first soak the toothbrush in mouthwash or an effervescent denture cleaner.

Replace your toothbrush every three to four months.

toothpaste

The following experiment will show a child the value of properly brushing their teeth.

The child should write into their science journal all of the steps they do in the experiment.

Use four raw eggs, four cups, toothpaste, soda, lemon juice, and four sticky notes.

Label the sticky notes Soda 1, Soda 2, Juice 1, and Juice 2. Place one sticky note on the side of each glass.

Carefully completely cover two of the four eggs with toothpaste.

Pour a dark brown soda (such as cola) into the two cola cups. Pour lemon juice into the two juice cups. Leave enough room to add the eggs.

Very carefully submerge the toothpaste covered eggs into the Soda 1 and Juice 1 cups.

Carefully submerge the uncovered eggs into the Soda 2 and Juice 2 cups.

Discuss with your child. Ask them to write their predictions into their science journal.

Put the cups somewhere safe for about 12 hours.

Remove both of the soda eggs and rinse them in cool water (removing the toothpaste from the toothpaste covered egg). Gently pat them dry with a towel. Place the eggs on their sticky note labels.

Repeat for the juice eggs.

The unprotected egg in the soda will have become discolored.

The unprotected egg in the juice will have a soft shell.

Discuss the results with your child.

Toothpaste protected the egg shell in the soda from becoming discolored and brown.

Toothpaste protected the egg shell in the acidic lemon juice from becoming soft.

Toothpaste helps protect their teeth from becoming discolored and soft.

top

keyword: COBOL reserved word (z/OS)

keyword: JavaScript windows property

TOPS-10

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

for the PDP-10

TOPS-20

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

for the PDP-10 — [Wikipedia: List of operating systems](#)

Toshiba 4690 OS

operating system

Proprietary OS by Digital Research, Inc.

a Point of Sale (POS) operating system based on IBM 4690 OS and FlexOS

DOS

toString

keyword: JavaScript method

total harmonic distortion

5 December 2023: “What is THD?

- What is it?
- Why it happens?
- When it's good and when it's bad?

THD stands for Total Harmonic Distortion, a measure that quantifies the amount of harmonic distortion introduced by a device or system.

Harmonic distortion occurs when a device generates frequencies that are multiples of the original signal, leading to altered waveforms.

Several factors contribute to THD, including non-linearities in electronic components such as amplifiers, transistors, and tubes.

As a result, the output signal contains additional frequency components not present in the input signal.

☑ Example 1. Amplifiers:

When an audio amplifier introduces harmonic distortion, it can affect the clarity and purity of the reproduced sound. High-quality amplifiers aim to minimize THD to preserve the fidelity of the audio signal.

☑ Example 2. Audio Processing:

Some audio processing equipment, like analog equalizers or compressors, may unintentionally introduce harmonic distortion. While some level of distortion can be desirable for certain musical applications, excessive THD can degrade audio quality.

During the mixing or mastering process, engineers can add THD on purpose, to individual sounds or a whole mix, as it might sound pleasant to our ears. Or to achieve some sound designing goal, or to increase mix translation.

☑ Example 3. Speakers:

When the speaker attempts to reproduce a pure tone, the physical limitations will cause the speaker to produce additional frequencies (harmonics) that were not present in the original signal.

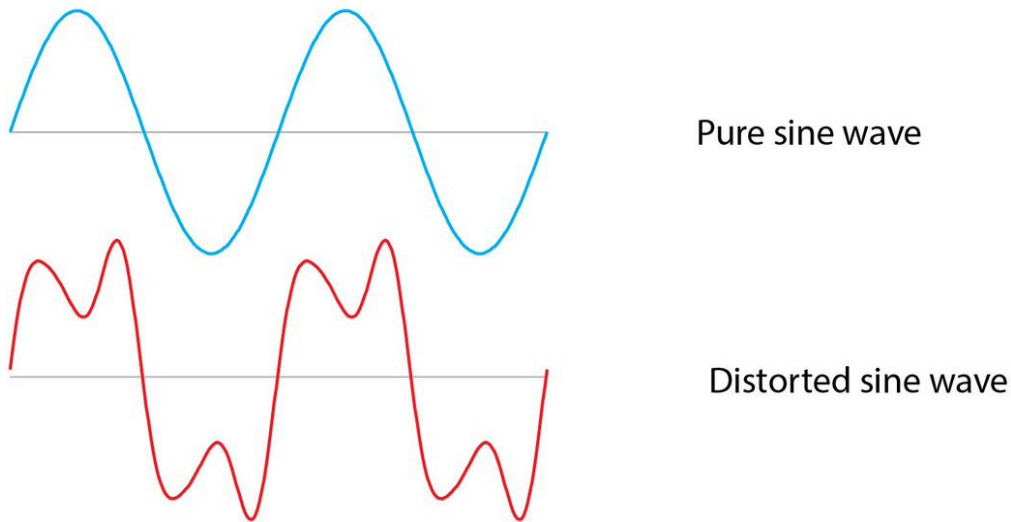
More expensive speakers have more expensive materials, and the speakers have

some advantages, being light and strong at the same time. These produce less THD.

Overall, high THD in a speaker results in a less accurate and potentially less enjoyable listening experience.

Understanding and controlling THD is crucial in various applications to maintain signal integrity and ensure the faithful reproduction of audio information.”

—[Nathaniel W](#)



Towns OS


operating system

Proprietary OS by Fujitsu

toupper

function: C string.h library function: stands for convert TO UPPERcase

See: [toxins](#)

See: [.tp](#)  — file extension

trace

keyword: COBOL reserved word (z/OS)

trailing

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

trait

keyword: PHP reserved word

See: `_TRAIT_` — PHP

transgender

“First, they came for the transgender, and I spoke out immediately even though I’m straight and cis because I’ve read the rest of the fucking poem.” —source unknown

transient

keyword: Java reserved key word

keyword: JavaScript reserved word

transient shaper

18 December 2023: “Pro mixing tip

We all know about using transient shapers on drums

But have you thought about using it on pianos, guitars etc?

Emphasizing notes attacks, string pulls, key pressings.

This can really improve “life” of your sounds. This what causes goosebumps if done right.

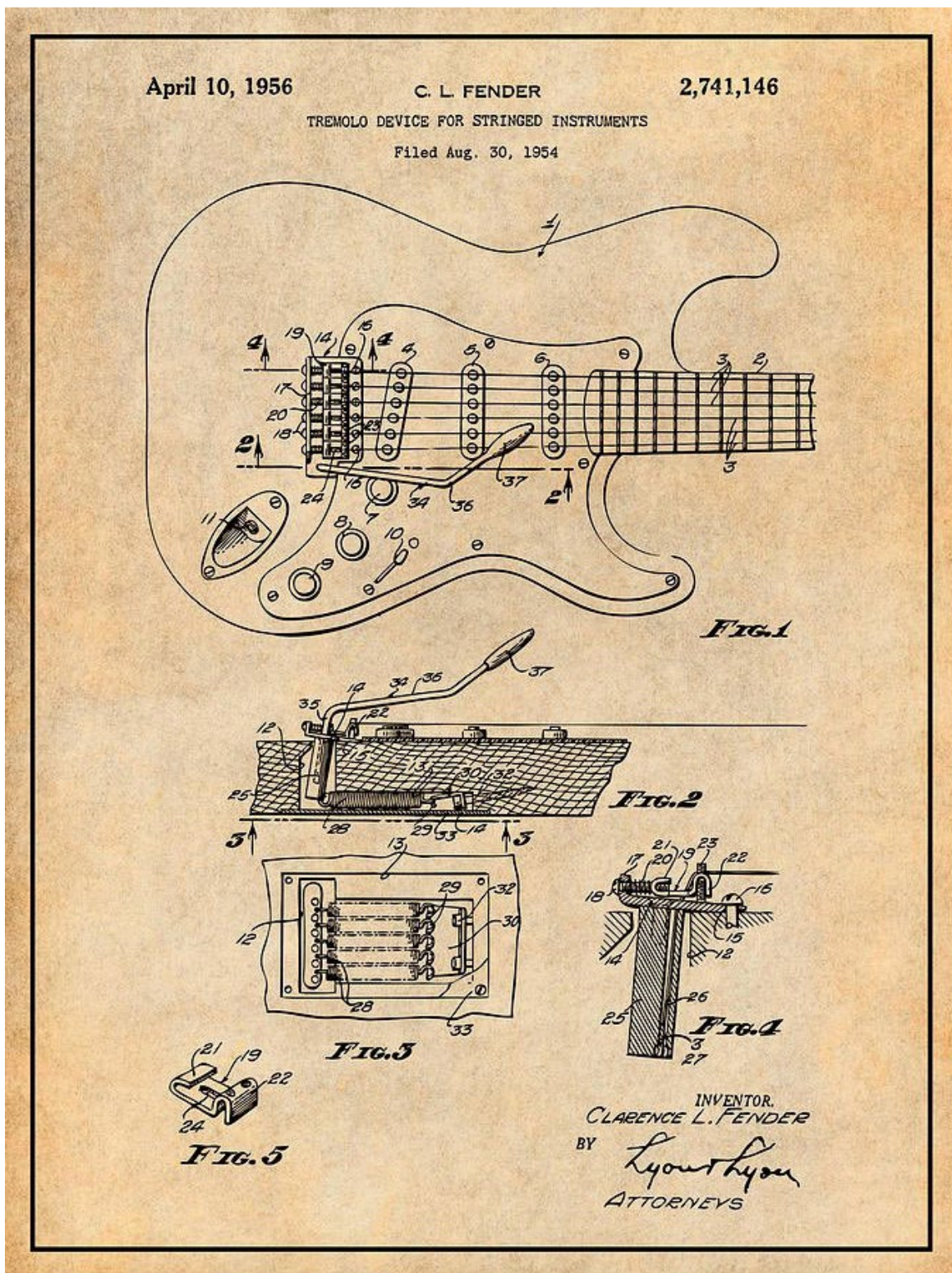
Right now I’m on Slate Digital transient shaper and like how it sounds very much”

—[Nathaniel W.](#)

transport

keyword: VHDL reserved key word

tremelo



—[Brian L](#)

trigger

keyword: SQL reserved word (Oracle)

trim

keyword: SQL reserved word (z/OS)

trim_b

keyword: SQL reserved word (z/OS)

trim_mb

keyword: SQL reserved word (z/OS)

trombone

Q: What is another term for trombone?

A: A wind driven, manually operated, pitch approximator.

Q: Why do people play trombone?

A: Because they can't move their fingers and read music at the same time.

Tru64 UNIX

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise.

alternate name for Digital Unix

Digital UNIX

true

keyword: COBOL reserved word (z/OS)

keyword: Java reserved literal value word

keyword: JavaScript reserved word

keyword: Ruby reserved word

keyword: SQL reserved word (z/OS)

Donald Trump

That Trump committed crimes and that Trump is being politically persecuted are both simultaneously true.

Hatred of Trump seems so strange, as he is so remarkably similar to Biden.

Love of Trump seems so strange, as he is so remarkably similar to Biden.

4 August 2023: “Ask an anti-imperialist what’s the worst thing Trump did and they’ll talk about real things like Yemen, Venezuela, Soleimani, Assange, the JCPOA, and the new cold war.

Ask a Democrat the same thing and they’ll talk about pretend nonsense like Russian collusion and insurrection.” —[Caitlin Johnstone](#)

Policy on Cuba: same as Biden

Policy on selling arms to Saudi Arabis: same as Biden

Policy on Syria: same as Biden

Policy on China: same as Biden

Policy on Iran: same as Biden

Policy on Venezuela: same as Biden

Policy on Wall Street billionaires: same as Biden

Policy on Israel: same as Biden

Policy on for-profit healthcare: same as Biden

Policy on militarizing police: same as Biden

Policy on taxing the rich: same as Biden — [Ryan Knight](#)

11 January 2024: “Donald Trump is not the alternative to Joe Biden. Neither one should be president ever again.” — [Stephanie Voltolin](#)

Trump tax cuts

“If Democrats were really worried about Trump’s tax cuts, they would have repealed Trump’s tax cuts for millionaires and billionaires when they controlled Congress.” — [Stephanie Voltolin](#)

trumpet

Q: What’s the difference between a jet airplane and a trumpet?

A: About three decibels.

try

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: PHP reserved word

See: @try — OBJECTIVE C

trypophobia

Trypophobia is the aversion to the sight of irregular patterns or clusters of small holes of bumps.

See: tryptophan

See: .ts  — file extension

Harriet Tubman

“Every great dream begins with a dreamer. Always remember, you have within you the strength, the patience, and the passion to reach for the stars to change the world.”
—Harriet Tubman

“Harriet Tubman freed an incredible amount of enslaved people, was a woman, a fugitive herself, AND after the fugitive slave law was passed. She went back countless times to free folks, incl almost her entire family but shit really gets weird when she’s a medic for the union. Because not only did she do all that work as an abductor for the Underground Railroad, she cared for and healed countless soldiers and freed folk suffering from terrible wounds and illnesses (that were responsible for 2/3rds of deaths throughout the war). She even gave up her provisions of military rations so she could be in solidarity with the other black folks who had to work to survive. She made pies and root beer at night to make money, while she was healing folks. And teaching folks. And helping to build a laundry house to train freed folks to become laundresses. And did a lot more on top of all that. And this is before talking about her heroism in actual battle.” —[rafael](#)

Tulsa Race Massacre

The Tulsa Race Massacre occurred 31 May 1921 in Tulsa, Oklahoma, in the Greenwood District (also known as Black Wall Street). The buildings were destroyed, more than 9,000 residents displaced, and 300 African-Americans killed.

See: [turkey](#)

Turkey

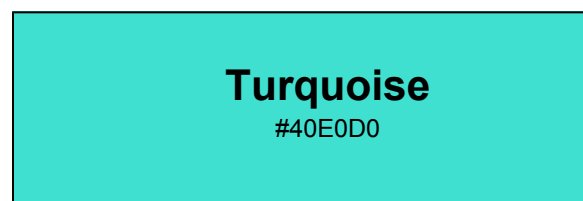
1 September 2023: “Putin to meet Erdogan amid push to revive Ukraine grain deal
The announcement of Monday’s meeting in Sochi comes amid international efforts
to patch up the Black Sea Grain Initiative.” —[Aljazeera](#)

Nugaymath Turquia

“The Great Female Warrior called Nugaymath Turquia, a Moorish Amazon was the
greatest archer of her time. Around 11 Century CE she commanded 300 Black Female
Warrior Achers who were armed with daggers, swords, and the famous Turkish Bow
to laid siege to a Castle in Peninsula Spain. African warriors who lived in the Real-
World or Mythology were always told they were marksman with the bow. From the
Nile Valley to Spain Nugaymath was a Warrior woman.” —[Typical African](#)

Turquoise

keyword: HTML color name



Turtle Island

12 October 2023: “This place isn’t just ‘Turtle Island’... if you knew the full story
you’d understand that it’s full name is ‘Teenage Mutant Ninja Turtle Island’ ” —[Ol’
Fine Rez Dog](#)

tvOS

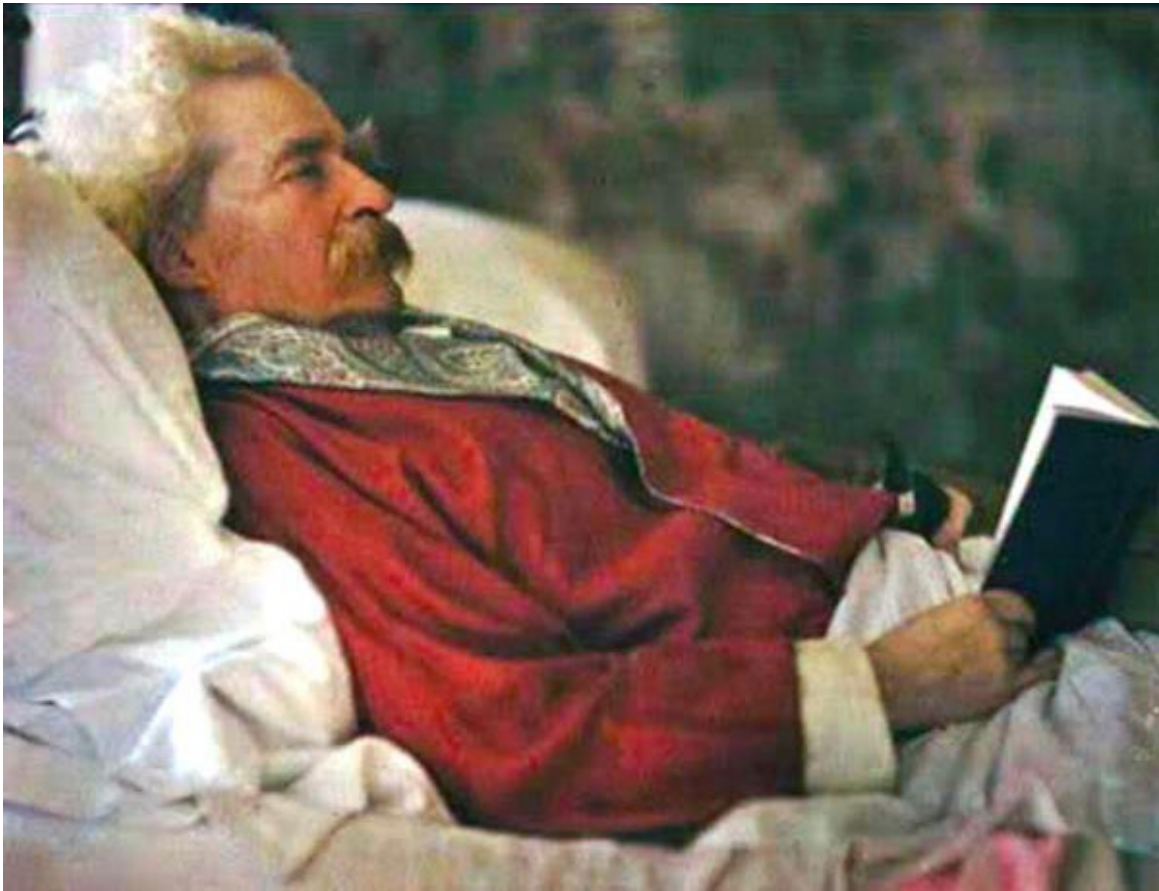
abbreviation

operating system

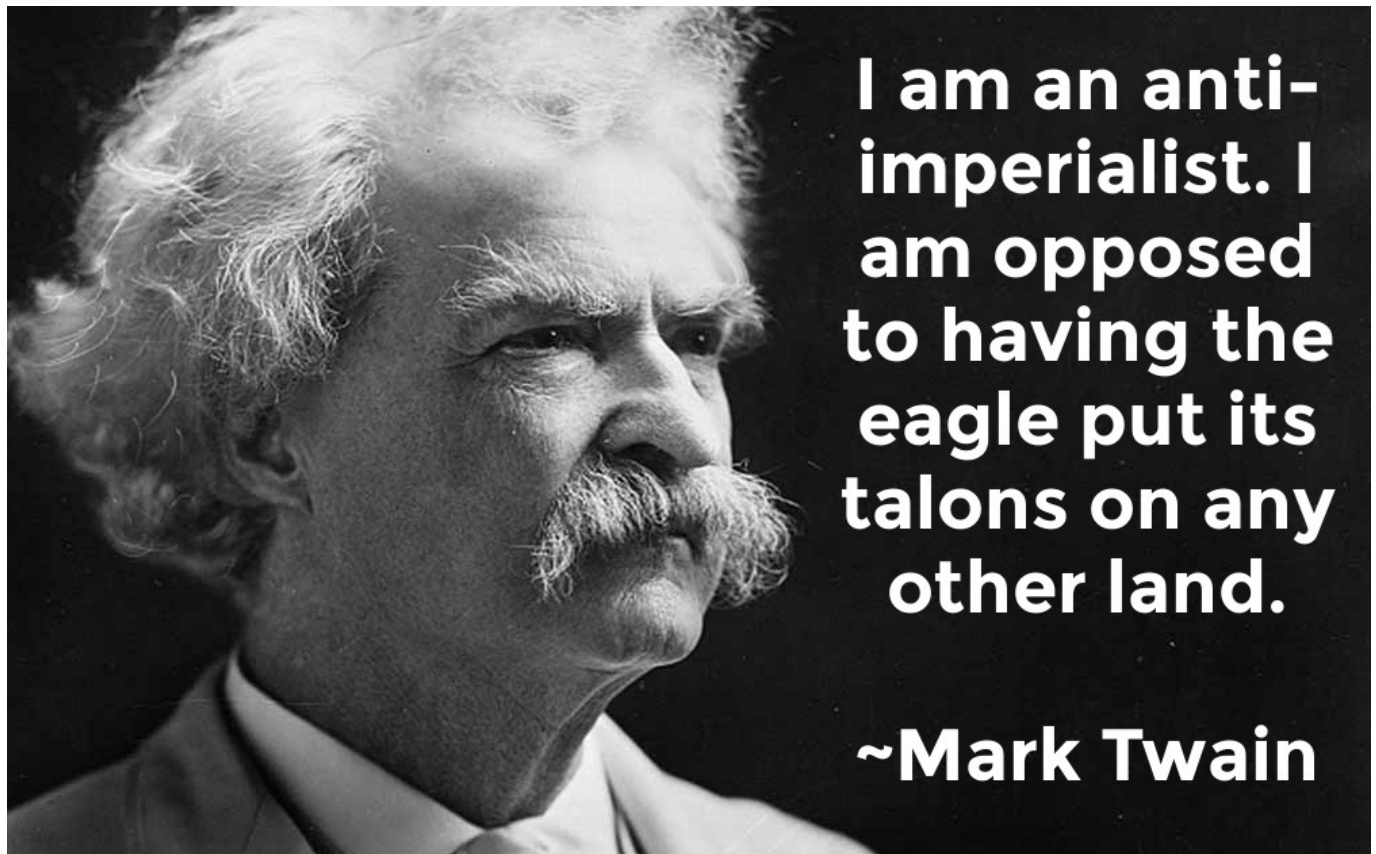
Proprietary OS by Apple for Apple TV.

Mark Twain

Mark Twain was photographed in color late in his life.



Behold, a racist White man who mustered all his writing talent to state that the Native Americans of eastern Nevada were “the wretchedest type of mankind — manifestly descended from the selfsame gorilla, or kangaroo, or Norway rat, whichever animal the Darwinians trace them to” —[Brett Chapman](#)



“I am an anti-imperialist. I am opposed to having the eagle put its talons on any other land.” —Mark Twain

Twinkies

Twinkies are banned in Austria, Finland, and Norway, and have a warning label in the European Union because of artificial food coloring yellow 5, which causes, allergic reactions, hives, itching, coughing, and vomiting.

Twitter / X

5 August 2023: “ ‘Stop calling it Twitter’ says guy who deadnames his own child.”
—[Lauren McKenzie](#)

5 August 2023: “Oh, it gets worse ... ‘Facing lawsuit from Musk, nonprofit head says he won’t stop exposing Twitter’s problems’
<https://www.cnbc.com/2023/08/04/ccdh-head-says-he-wont-stop-exposing-twitter-problems-after-musk-suit.html> ‘Musk threatens to sue researchers who documented the rise in hateful tweets’ ” —[Whirled Peas](#): Article [CNBC](#) Musk thgreathens to sue researchers who documented the rise in hateful tweets. A nonprofit organization that

researches links between social media, hate and extremism has been threatened with a lawsuit by X

10 August 2023 [In response to X CEO Linda Yaccarino telling CNBC that “lawful but awful” content to be hidden]: “Have you guys figured that it’s a big game of good cop (Elon who “loves” free speech) and bad cop (Linda who wants to censor based on vague terms) to keep the frogs in the pot just long enough that people don’t notice that they are turning it into American WeChat?

All of the changes being phased in at Twitter “X” are a slippery slope. ID verification, banking and tying it all to your social media/Twitter posts is the plan. The problem with a slippery slope is that the farther you go down, the harder it is to get back up and off the slope.

For years, the US government (which Elon can thank for a good chunk of his wealth) has tried to do this - get your ID tied to your social media. I’ve covered this many times, the goal is to have AI go through your social media + other data tied to your id + roll it into a pre crime system

The Trump administration (mainly Kushner and a friend of Trump’s, Bob Wright) tried to push this through by creating HARPA, Biden ended up creating HARPA, it’s now called ARPA-H. Bill Barr in the Trump admin made pre-crime official DOJ policy, how far down this slope should we go?” —[Whitney Webb](#)

20 August 2023: “Then delete your account” —[Elon Musk](#)

20 August 2023: “Pretty fun blocking people who complain that blocking is going away.

How does the medicine taste?” —[Elon Musk](#)

28 August 2023: “A Saudi court has sentenced a man to death based solely on his Twitter & YouTube activity.

Repression has reached a terrifying new stage when a court can hand down the death penalty for nothing more than tweets. Saudi authorities should quash the verdict.

On July 10, 2023, the Specialized Criminal Court, convicted Muhammad al-Ghamdi of several criminal offenses related solely to his peaceful expression online. The court sentenced him to death, using his tweets, retweets, and YouTube activity as the evidence against him.

Al-Ghamdi’s brother is a known Saudi scholar and govt critic exiled in the UK. On Aug 24, Saeed wrote on Twitter that the “false ruling aims to spite me personally after failed attempts by the investigations to return me to the country.”

Saudi authorities in recent years have increasingly retaliated against the family members of critics and dissidents abroad in an effort to coerce them to return to the country, Human Rights Watch said.

Court docs cite two X platform accounts as belonging to al-Ghamdi. Human Rights Watch found that the first account had two followers and the second had eight.

Both accounts, which have fewer than 1,000 tweets combined, largely contained

retweets of well-known critics of govt.

The court docs say the court issued the sentence on the grounds that the crimes “targeted the status of the King and the Crown Prince,” & that the “magnitude of his actions is amplified by the fact they occurred through a global media platform, necessitating a strict punishment.” —[Joey Shea](#)

29 August 2023: “Second-biggest owner of Twitter is executing a man for his tweets.

Silence from the owner of Twitter, who is a self-styled ‘free speech absolutist.’ Not even a “concerning”.” —[Mehdi Hasan](#)

See: .txt — file extension

Tylenol Cold and Sinus

5 December 2023: “The reason no over the counter allergy/cold meds work anymore is because the federal government and big pharma wanted a monopoly on meth. In the 90’s (1) Tylenol cold and sinus dried your face out so quick it hurt. Now you just ingest sugar water and stay ill” —[Antifa HR Director](#)

type

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: VHDL reserved key word

typedef

keyword: C keyword

keyword: Objective-C reserved word

typeof

keyword: JavaScript reserved word

typing

The average person does 56% of their typing with their left hand.

Tyre

Tyre, Lebanon, is about 4,750 years old and is the oldest continually inhabited city in the world.

See: tyrosine

Tyson

6 December 2023: “BREAKING: The biggest chicken and tuna companies in the U.S. have been found guilty of price fixing.

Now thousands of people are getting paid with money recovered from the corporations.

The State of Washington is using over \$40 million to send checks to 402,200 households.

Perdue, Tyson, Sanderson Farms, and JBS are colluding to raise chicken prices — up 61% over the last 15 years.” — [More Perfect Union](#)



U


ASCII: 55 hex

UNICODE: LATIN CAPITAL LETTER U

u

ASCII: 75 hex

UNICODE: LATIN SMALL LETTER U

See: .uax  — file extension

UFO

15 August 2023: “Aliens & UFOs are just an excuse to expand the military industrial complex into space, so the military can launch surveillance satellites, nukes and advanced weapons into orbit, it’s not about defending the planet from aliens, it’s about using fear to proliferate authoritarianism” —[MC Squared](#)

Uganda

13 August 2023: “ “It is unfortunate that the World Bank and other actors dare to want to coerce us into abandoning our faith, culture, principles and sovereignty, using money. They really underestimate all Africans.” - Uganda President Museveni”

—[Jackson Hinkle](#)

13 August 2023: “ “It is unfortunate that the World Bank and other actors dare to want to coerce us into abandoning our faith, culture, principles and sovereignty, using money. They really underestimate all Africans.” - Uganda President Museveni”

—[Jackson Hinkle](#)

28 July 2023: “Uganda President Museveni to Putin:

“One facet of neo-colonialism and colonialism was Africa being confined to producing only raw materials, crops, like coffee, and minerals. I can give you an example: the global business for coffee is worth \$460 billion. That is the value of the coffee business in the world. But of those \$460 billion the coffee producing countries of the whole world share only \$25 billion and Africa shares only \$2.4 billion out of \$460 billion.

This issue is the biggest stunting factor why the African economies are stunted; they do not grow, because all the value is taken by other people. Germany earns more from coffee than the whole of Africa. Germany earns \$6.85 billion from coffee, while Africa earns only \$2.4 B 2.5 billion. This is the big scandal.

So, what I want to propose to Russia and China is to discourage as a policy the importing of raw materials from Africa, to instead work with the Africans to add value at source. This would within a very short time transform the economies of Africa from low- and mid-income to high- and middle-high income because we see from the example of Uganda that everything is depressed now; production is high but we are still producing raw materials.” ” —[COMBATE](#)

On Monday, 29 May 2023, Ugandan President Yoweri Museveni signed into law an amended version of the Anti-Homosexuality Bill 2023. The law restricts freedom of speech of lesbian, gay, bisexual, and transgender people, criminalizes homosexuality, and imposes the death penalty for “aggravated homosexuality.”

uid

keyword: SQL reserved word (Oracle)

Ukraine

7th century: The territory of modern Ukraine was Old Great Bulgaria, capital city Phanagoria. As the 7th century ended, the Khazars moved in and founded the Khazar kingdom.

880: the Kyivan Rus' was created with its capital in Kyiv.

12th century: The Kievan Rus' collapsed because of the Mongol invasion. It was replaced by the Principality of Galicia-Volhynia

14th century: Poland and Lithuania fought wars against the Mongols, taking control of Ukraine.

15th century: The Crimean Khanate took control of Ukraine.

1770s: Russia invaded.

1780s: Catherine the Great took control of Ukraine.

World War II: "In the red Army fought more than 7 million citizens of Ukraine. A significant part of Ukrainians sat among the command staff and officers of the Red Army, were the front commanders, marshals and generals. For the bravery and courage, revealed in battles with the Nazi invaders, Ukrainian and inhabitants of Ukraine as a part of all Soviet fronts 2.5 million awarded orders and medals of the amount over 7 million prizes were awarded to soldiers of the Soviet Armed Forces as a whole. Among the Heroes of the Soviet Union Of the highest award of the USSR - Ukrainian constituted 18.2% or 2072 persons. Of the 115 twice Heroes of the Soviet Union, awarded the title during the war - 32 were born in Ukraine or were Ukrainians, and Ivan Kozhedub was three times Hero of the Soviet Union. Among the 800,000 women who served in the red Army at various fronts during the Second World War, there were 127 thousand representatives of Ukraine." —[atra](#)

9 February 1990: "This Gorbachev Foundation record of the Soviet leader's meeting with James Baker on February 9, 1990, has been public and available for researchers at the Foundation since as early as 1996, but it was not published in English until 2010 when the Masterpieces of History volume by the present authors came out from Central European University Press. The document focuses on German unification, but also includes candid discussion by Gorbachev of the economic and political problems in the Soviet Union, and Baker's "free advice" ("sometimes the finance minister in me wakes up") on prices, inflation, and even the policy of selling apartments to soak up the rubles cautious Soviet citizens have tucked under their mattresses.

Turning to German unification, Baker assures Gorbachev that "neither the president nor I intend to extract any unilateral advantages from the processes that are taking place," and that the Americans understand the importance for the USSR and Europe of guarantees that "not an inch of NATO's present military jurisdiction will spread in an eastern direction." Baker argues in favor of the Two-Plus-Four talks using the same assurance: "We believe that consultations and discussions within the framework of the 'two+four' mechanism should guarantee that Germany's unification will not lead to NATO's military organization spreading to the east." Gorbachev responds by quoting

Polish President Wojciech Jaruzelski: “that the presence of American and Soviet troops in Europe is an element of stability.”

The key exchange takes place when Baker asks whether Gorbachev would prefer “a united Germany outside of NATO, absolutely independent and without American troops; or a united Germany keeping its connections with NATO, but with the guarantee that NATO’s jurisdiction or troops will not spread east of the present boundary.” Thus, in this conversation, the U.S. secretary of state three times offers assurances that if Germany were allowed to unify in NATO, preserving the U.S. presence in Europe, then NATO would not expand to the east. Interestingly, not once does he use the term GDR or East Germany or even mention the Soviet troops in East Germany. For a skilled negotiator and careful lawyer, it seems very unlikely Baker would not use specific terminology if in fact he was referring only to East Germany.

The Soviet leader responds that “[w]e will think everything over. We intend to discuss all these questions in depth at the leadership level. It goes without saying that a broadening of the NATO zone is not acceptable.” Baker affirms: “We agree with that.” — [National Security Archive](#)

23 December 2004: “**The power struggle in Ukraine and America’s strategy for global supremacy** In 1997, former US security advisor Zbigniew Brzezinski published a book entitled *the Grand Chessboard* that attracted considerable attention and treated America’s strategy for global supremacy. By chessboard, Brzezinski meant Eurasia, the enormous land mass comprising two continents and containing the majority of the world’s population.” — [Peter Schwarz](#)

“In 2004, the US could have stayed out of Ukrainian affairs altogether, but instead it chose to support a color revolution.” — [David Sacks](#)

“In 2008, the US could have listened to then-ambassador, now-CIA director Bill Burns’ advice not to expand NATO to Ukraine because it would cross the brightest of all redlines for the entire Russian leadership. But instead the US issued the Bucharest declaration that Ukraine would join NATO.” — [David Sacks](#)

(2008) tweeted 13 August 2023: “The US began openly touting NATO’s expansion into Ukraine in 2008 under Bush.

That was when now-CIA-Director Bill Burns wrote his memo warning that was a red line for all in Russia, not just Putin, and would trigger war in Crimea and Donbas.” — [Glenn Greenwald](#)

“In 2013, the US and its European allies could have compromised on the EU accession agreement to address Russian concerns. But instead they maintained that they would not change even a punctuation mark.” — [David Sacks](#)

10 February 2014: “**Leaked phone call on Ukraine lays bare Washington’s gangsterism** the leaked tape of a phone call between the State Department’s Victoria Nuland and the US ambassador to Ukraine provides an unvarnished expression of the

gangster methods employed by US imperialism.” —[Bill Van Auken](#)

25 February 2014: “**Coup in Ukraine: A warning to the international working class** What has seemed unthinkable since 1945 has come to pass: while the US and Germany ruthlessly destabilized Ukraine, fascists have been the decisive force on the ground.” —[Peter Schwarz](#)

(25 February 2014) 10 August 2023 referencing an event that occurred on 25 February 2014: “Remember that time in 2014 when @ChrisMurphyCT went on CSPAN and openly bragged about backing the overthrow of Ukraine’s democratically elected government?”

Worth keeping in mind in light of the recently leaked cables showing the US just pressured Pakistan to do the same.” —[System Update](#)

3 March 2014: “**The crisis in Ukraine** The crisis that has erupted in Ukraine following the right-wing coup engineered by the United States and Germany and the intervention of Russia into Crimea has created the most dangerous international confrontation since the end of World War II.” —[The International Committee of the Fourth International](#)

7 March 2014: “US defends role of Kiev regime and fascists in Odessa massacre” —[Barry Grey](#)

7 March 2016: “Two years since the Kiev coup” —[Andrea Peters](#)

“The background and implications of the 2014 far-right coup in Kiev, which overthrew the pro-Russian President Viktor Yanukovych, is critical for understanding the current Ukraine-Russia war. This coup was openly supported by US and European imperialism and implemented primarily by far-right shock troops such as the Right Sector and the neo-Nazi Svoboda Party.

It represented the temporary culmination of long-standing efforts by US imperialism to install a puppet regime on the borders of Russia and brought the world a major step closer to a war between the largest nuclear powers, the US and Russia. Ukraine has since been systematically built up as a launching pad for a NATO war against Russia.

The regime change prompted the outbreak of an ongoing civil war in the east of Ukraine, between Russian-backed separatists and the US-backed Ukrainian army, that has claimed the lives of tens of thousands and displaced millions.

In the US, the coup was a catalyzer for an ever more aggressive campaign against Russia and a significant shift to the right among layers of the upper middle class. US imperialism and NATO have funded the Ukrainian state and far-right forces with billions of dollars.

The German ruling class seized upon the coup as a pretext for aggressively stepping up its campaign to remilitarize and justify the crimes of fascist forces. For the first time since the end of World War II, representatives of a German government were

seen on photos with avowed Ukrainian neo-Nazis.

Internationally, pseudo-left forces such as the International Socialist Organization (ISO) in the US, the New Anti-capitalist Party of France (NPA), and the Russian Socialist Movement (RSM) supported the coup, falsely proclaiming it a “revolution.” The ICFI and WSWS alone advanced a principled, socialist opposition to this imperialist operation, warning the working class of its dangerous consequences.”

—[World Socialist Web Site](#)

“In 2014, the US could have supported a peaceful transition of power in Ukraine. But instead it backed the Maidan coup against a democratically-elected government.”

—[David Sacks](#)

“In 2015-2022, the US could have supported peaceful attempts, via the Minsk agreements, to resolve the protests by ethnic Russians that broke out in reaction to the coup. But instead it supported Kiev’s attempts to violently suppress and shell the Donbas.” —[David Sacks](#)

12 December 2017: “Declassified documents show security assurances against NATO expansion to Soviet leaders from Baker, Bush, Genscher, Kohl, Gates, Mitterrand, Thatcher, Hurd, Major, and Woerner

U.S. Secretary of State James Baker’s famous “not one inch eastward” assurance about NATO expansion in his meeting with Soviet leader Mikhail Gorbachev on February 9, 1990, was part of a cascade of assurances about Soviet security given by Western leaders to Gorbachev and other Soviet officials throughout the process of German unification in 1990 and on into 1991, according to declassified U.S., Soviet, German, British and French documents posted today by the National Security Archive at George Washington University

The documents show that multiple national leaders were considering and rejecting Central and Eastern European membership in NATO as of early 1990 and through 1991, that discussions of NATO in the context of German unification negotiations in 1990 were not at all narrowly limited to the status of East German territory, and that subsequent Soviet and Russian complaints about being misled about NATO expansion were founded in written contemporaneous memcons and telcons at the highest levels.”

—[National Security Archive](#)

April 2019: “**The Zelensky government** In April 2019, the comedian Volodymyr Zelensky is elected president in a massive rebuke of the far-right 2014 coup. While he appeals to anti-war sentiments in the population, Zelensky maneuvers between the imperialist powers. When he tries to broker a deal with the separatists in East Ukraine in collaboration with Germany, he confronts mass protests by the far-right. Moreover, he gets almost immediately embroiled in the US impeachment crisis. In March 2020, following the failure of the Trump impeachment by the Democrats, and amidst significant pressure from the far-right, Zelensky reshuffles his cabinet in March 2020, bringing in a large number of officials with close ties to the US that will

play a critical role in the escalation of the anti-Russia war drive in the coming two years.” —[World Socialist Web Site](#)

“In 2021-2022, the US could have negotiated over the draft Russian agreements which principally sought a written guarantee that Ukraine would not join NATO. But instead it insisted that it would never compromise over that policy.” —[David Sacks](#)

“In 2022, after the war broke out, the US could have supported the peace process in Belarus and Istanbul, but instead it sabotaged those agreements.” —[David Sacks](#)

10 July 2023: “Let us not be deceived: NATO is an expanding instrument of U.S. global power that provoked Russia into a criminal invasion and occupation of Ukraine. This proxy war between the American Empire and the Russian Federation could lead to World War III. We must stop the war and war crimes (including cluster bombs used by all parties) and embark on diplomatic talks that should lead to a just peace. As the great W. E. B. Du Bois wrote in 1945 “I seem to see outlined a third World War based on the suppression of Asia and the strangling of Russia.” The Democratic Party is a party of war and Wall Street targeting Russia and China. Let us save our democracy and world by dismantling U.S. militarism at home (as in Cop Cities) and abroad - as Martin Luther King Jr. painfully reminded us! #NATO #ClusterBombs ” —[Cornel West](#)

Mar 2022: “Russians have no chance. War will be over in weeks”

June 2022: “Russia is running out of soldiers and weapons. Ukraine victory by winter”

Oct 2022: “Russian soldiers retreating in droves, begging for mercy. Victory by spring”

Feb 2023: “Spring offensive coming! Russians will be defeated! Crimea will be retaken!”

May 2023: Bakhmut is taken by Russia. —[Treebeard](#)

19 March 2023: “Here’s the video of Lindsay Graham and John McCain confirming what I’ve said previously that the Ukraine war with Russia was planned for 2017 after a Hillary victory. Nothing to do with Russia’s invasion. Trump ruined their plan.” —[Polly Tickal](#) [includes video]

19 March 2023: “Don’t fall for propaganda. Despite constant harping on about the EU standing up to authoritarian regimes with our exalted “values,” we swore off Russian fossil fuels only to sign an oil and gas deal with Azerbaijan, a state that ticks every box on the autocrat’s bingo card.” —[Clare Daly](#), Member of the European Parliament [includes video]

19 March 2023: “Russia has already rebuilt part of Mariupol and @washingtonpost apparently doesn’t see how that undermines their narrative regarding the motivations for this war ... to this day Iraq doesn’t have a water purification system that works

properly bc the US destroyed it” —[50317](#)

Other videos carried on Russian state media early Sunday showed Putin sitting in an empty hall of a rebuilt philharmonic, as well as talking to a small group of residents in nighttime darkness outside a newly constructed residential complex in the Nevsky district, a project widely used by Russian propagandists to praise Moscow's swift rebuilding of the city.—*Washington Post*

18 July 2023: “Meanwhile, for the United States and its NATO allies, these 18 months of war have been a strategic windfall, at relatively low cost (other than for the Ukrainians). The West's most reckless antagonist has been rockeed. NATO has grown much stronger with the additionsof Sweden and Finland. Germany has weaned itself from dependence on Russian energy [the Biden administration blew up the RUssia-Germany undersea pipeline] and, in many ways, rediscovered its sense of values. NATO squabbles make headlines, but overall, this has been a triumphal summer for the alliance.” —@IgnatiusPost, David Ignatius, *Washington Post*

19 July 2023: “The debate over whether Russia will actually stop or even sink cargo ships in the Black Sea is missing the point. There won't be any container ships in the area because nobody will insure them, and 21st century shipping doesn't even pull out of the harbor without insurance.” —[Big Serge](#)

18 July 2023: “They lied to me about Vietnam, they lied to me about Nicaragua, they lied to me about Yugoslavia, they lied to me about Iraq twice, they lied to me about Afghanistan, they lied to me about Libya, they lied to me about Syria. Excuse me, I'm supposed to believe them about Ukraine?” —[Liberals Are Not The Left](#)

9 August 2023: “People think, increasingly it appears, that we shouldn't be doing this. Well, let me start by saying we haven't lost a single American in this war. Most of the money that we spend related to Ukraine is actually spent in the US, replenishing weapons, more modern weapons. So it's actually employing people here and improving our own military for what may lie ahead.” —Senate Minority Leader Mitch McConnell

10 August 2023: “McConnell defends the proxy war in Ukraine: “We haven't lost a single American... Most of the money that we spend related to Ukraine is actually spent in the US, replenishing weapons... So it's actually employing people here and improving our own military for what may lie ahead.” ” —[Aaron Maté](#)

10 August 2023: “Biden admin encouraged Ukraine to integrate into NATO & assault Donbas. It refused to seriously address Russia's Dec. 2021 proposals. After the invasion, it blocked a peace deal. It then pushed Ukraine into a counteroffensive it knew had no chance. Then it told Ukraine it won't join NATO anyway.” —[Aaron Mateé](#)

12 August 2023: “And now, in the wake of a failing counteroffensive, the US could

seek to enter into serious negotiations with the Russians, but instead its demanding that the slaughter continue.

At every fork in the road, the US foreign policy elite have chosen the path of confrontation and conflict as opposed to compromise and peace.” —[David Sacks](#)

13 August 2023: “It always gets spun as “supporting Russia” to say the US and its allies provoked the war in Ukraine, but that’s moronic. You don’t have to support Russia at all to acknowledge the well-documented ways the US empire provoked and sustains this war to advance its own agendas. You can hate Putin with all your heart, mind, body and soul and still acknowledge those extensively documented and glaringly obvious facts. Spinning the acknowledgement of obvious facts as sinister support for a foreign government is done solely to obfuscate criticism of our own rulers.” —[Caitlin Johnstone](#)

19 August 2023: “There’s not enough rage at the US empire for provoking and perpetuating the war in Ukraine. It’s mostly just griping about how much it costs and whether it’s sound strategy. How about the fact that human lives are being spent like pennies for the advancement US global hegemony?

Think about how much it hurts to have one death in your family. Think about how much it rocks an entire community to lose even one life to violence. Mountains of human bodies are being piled up in violent deaths, all to secure US geostrategic interests in Eurasia. Pure horror.

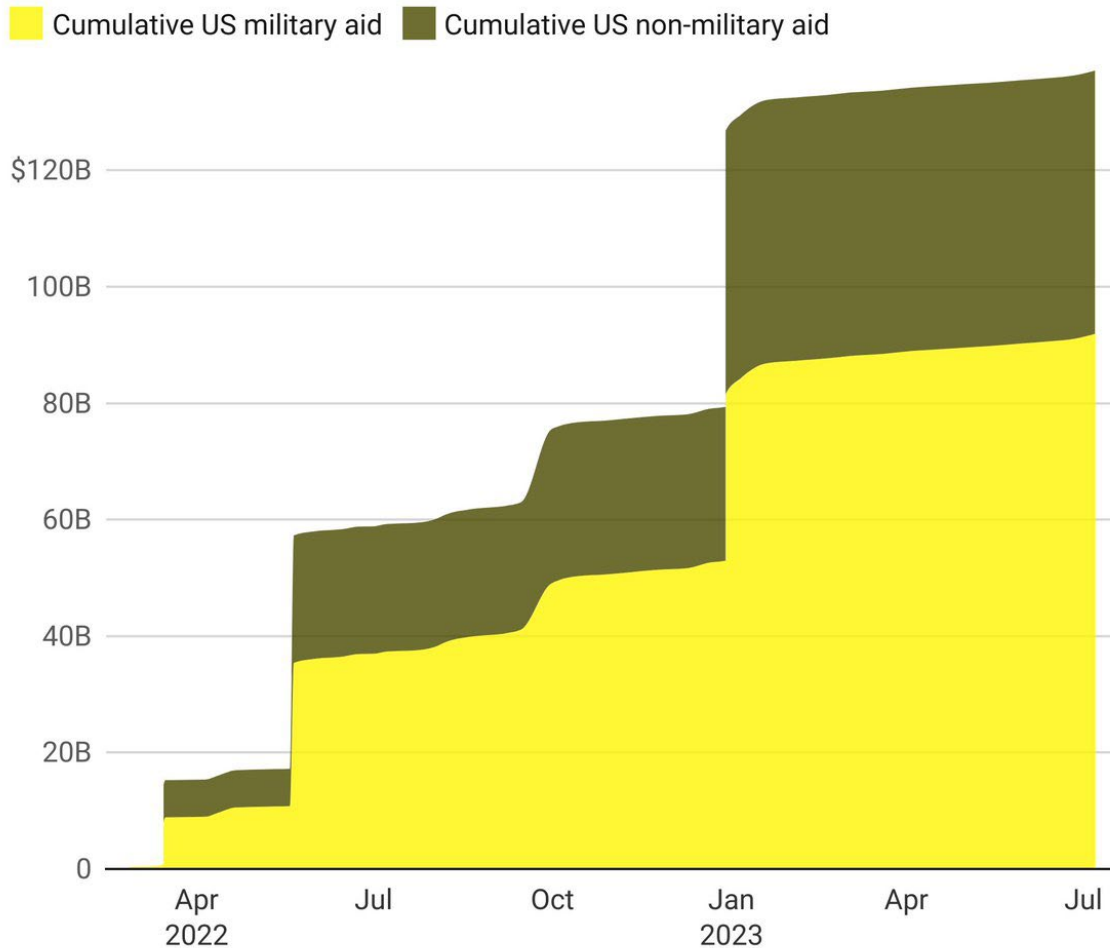
The empire had multiple opportunities to end this before it started. It had an opportunity to end it in April 2022. It had an opportunity to end it this past November. But it kept shoving it through to advance US interests, and young lives kept being sacrificed to the war god.

Meanwhile US officials openly gloat all the time about how much this war is serving US interests. This should draw white hot rage from everybody.

And then these monsters have the gall to spend weeks anonymously whining to the press that the counteroffensive is failing because Ukrainians are too cowardly to charge through Russian minefields under heavy artillery fire. Absolutely enraging.”

—[Caitlin Johnstone](#)

Biden has approved \$137 billion in Ukraine aid

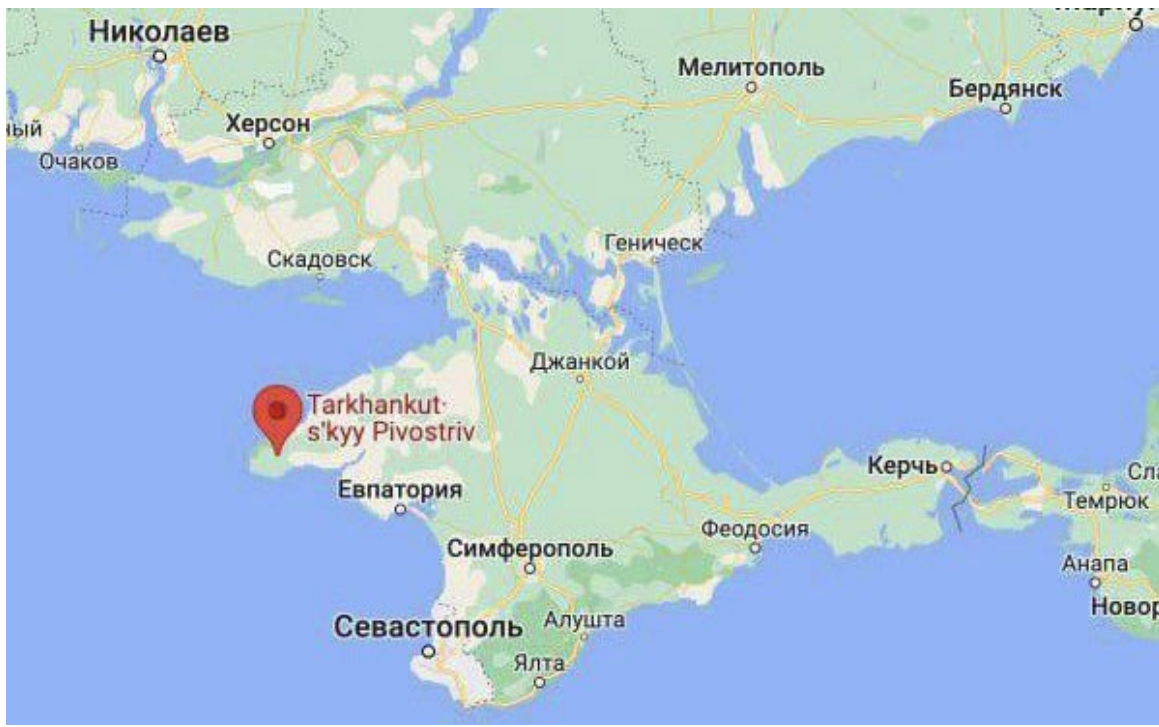


Range: 2/25/22–7/7/23. Data: P.L. 117-103, 117-128, 117-180, 117-328; Federal Register.
Full analysis: stephensemmler.substack.com

Chart: Stephen Semler (@stephensemmler) • Created with Datawrapper

20 August 2023: —[Mary Najeddine](#)

24 August 2023 [see notes that follow]: “It is reported that Ukrainian special forces landed 40 people in Western Crimea using 6 boats, but the suicide mission was attacked and only 15 made it out and back to Nikolaev in 2 boats” —[What the media hides](#). [Ukraine claims they killed 30 Russians; Russia claims they killed 30 Ukrainians]



25 August 2023: “I’ve seen multiple videos of Hawaiians complaining about Ukraine aid after seeing what they are getting

This sentiment is spreading FAST across Hawaii and around the nation

The NATO left has no idea how out of touch they are and how screwed Democrats are

“\$700? Oh well I get it. I know we are struggling but it’s important to continue the expansion of NATO and stop Vladimir Putin”

Is this truly what liberals think is happening?” — [Revolutionary Blackout Network](#)

29 August 2023: “Americans are buying up the best fertile lands of Ukraine [larger than all of Italy].

The process of liquidation of the seed fund and the seizure of arable land is led by the notorious multinational company Monsanto . 52% of Ukraine’s land fund has already become its property, as well as the property of Cargill and Dupont. They are controlled by BlackRock, which we wrote about earlier.

In addition to the land, Monsanto coveted the seed fund of Ukraine in order to be able to produce a huge amount of agricultural products on the best land at minimal cost.

Now Alina Levchenko, head of the Supervisory Board of the Center for Certification and Expertise of Seeds and Seed Material, is bringing the enterprise to bankruptcy in order to transfer control to Monsanto. At the same time, Ukraine completely loses any independence in the cultivation of the seed fund.

Having seen what prospects could open up on the example of the scandal with the supply of Ukrainian grain to Europe, Monsanto seeks to gain control over both Ukrainian seed material and arable land.

Agricultural resources of Ukraine will be used to establish control over the EU food

market.” —[Sprinter](#)

29 August 2023: “Today we are announcing a significant new assistance package for Ukraine. Guided rockets, anti-armor, and other munitions will help Ukraine’s military forces to defend their country’s sovereignty, territory, and people.”

—[Secretary of State Antony Blinken](#)

29 August 2023: “US announces new \$250m military assistance package for Ukraine,” —[Aljazeera](#)

30 August 2023: “Fresh from a trip to Kyiv, Sen. Richard Blumenthal (D-CT) is arguing that the US is getting its “money’s worth” in Ukraine because Russia is taking losses and no Americans are dying, showing a lack of concern for Ukrainian lives.

“Even Americans who have no particular interest in freedom and independence in democracies worldwide, should be satisfied that we’re getting our money’s worth on our Ukraine investment,” Blumenthal wrote in the *Connecticut Post*.

For less than 3 percent of our nation’s military budget, we’ve enabled Ukraine to degrade Russia’s military strength by half ... All without a single American service woman or man injured or lost,” he added.

The argument has become a common talking point among hawks in Washington who want the US to keep fueling the proxy war against Russia. Sen. Mitt Romney (R-UT) recently called the conflict “the best national defense spending I think we’ve ever done.”

“We’re losing no lives in Ukraine, and the Ukrainians are fighting heroically against Russia,” Romney said. “We’re diminishing and devastating the Russian military for a very small amount of money ... a weakened Russia is a good thing.”

The hawkish senators’ comments came amid Ukraine’s faltering counteroffensive. Despite the lack of success on the battlefield, the Biden administration and most members of Congress want to keep funding the war, which they acknowledge would not continue without US support.

“As Zelensky is frank and forthcoming to say, Ukraine could not have survived without America and our allies,” Blumenthal said. “But his counteroffensive is far from an assured success. In the end, the only way he loses is if America pulls the plug.”

The *Washington Post* recently reported that US intelligence has determined Ukraine’s counteroffensive will fail to meet its main objective of severing Russia’s land bridge to Crimea. Despite the conclusion, the US is pushing Ukrainian commanders to go harder on the battlefield and complaining that Ukraine has become too “casualty averse.”

Leading up to the counteroffensive, the Discord leaks and other media reports showed that the US did not believe Ukraine could regain significant territory. But the Biden administration still pushed for the assault and rejected the idea of a ceasefire.”

—[Dave DeCamp](#)

30 August 2023: “This war was totally and completely unprovoked by the United States and only a Kremlin agent would suggest otherwise, but also US officials just happen to constantly be boasting about all the ways this war advances US interests as a very low-cost, high-reward investment.” — [Caitlin Johnstone](#)

2 September 2023: “US Officials Keep Boasting About How Much The Ukraine War Serves US Interests

One of the most glaring plot holes in the official mainstream narrative on Ukraine is the way US officials keep openly boasting that this supposedly unprovoked war which the US is only backing out of the goodness of its heart just so happens to serve US interests tremendously.

In a recent article for the Connecticut Post, Senator Richard Blumenthal assured Americans that “we’re getting our money’s worth on our Ukraine investment.”

“For less than 3 percent of our nation’s military budget, we’ve enabled Ukraine to degrade Russia’s military strength by half,” writes Blumenthal. “We’ve united NATO and caused the Chinese to rethink their invasion plans for Taiwan. We’ve helped restore faith and confidence in American leadership — moral and military. All without a single American service woman or man injured or lost, and without any diversion or misappropriation of American aid.”

As Antiwar’s Dave DeCamp recently observed, this type of “investment” talk about Ukraine has been getting more common. Last weekend Senator Mitt Romney called the war “the best national defense spending I think we’ve ever done.”

“We’re losing no lives in Ukraine, and the Ukrainians are fighting heroically against Russia,” Romney said. “We’re diminishing and devastating the Russian military for a very small amount of money ... a weakened Russia is a good thing.”

Last month Senate Minority Leader Mitch McConnell argued that Americans should support the US government’s proxy warfare in Ukraine because “we haven’t lost a single American in this war,” adding that the spending is helping to employ Americans in the military-industrial complex.

“Most of the money that we spend related to Ukraine is actually spent in the US, replenishing weapons, more modern weapons,” McConnell said. “So it’s actually employing people here and improving our own military for what may lie ahead.”

McConnell has been talking about how much this war benefits the US since last year. During a speech back in December the ailing swamp monster argued that “the most basic reasons for continuing to help Ukraine degrade and defeat the Russian invaders are cold, hard, practical American interests.”

“Helping equip our friends in Eastern Europe to win this war is also a direct investment in reducing Vladimir Putin’s future capabilities to menace America, threaten our allies and contest our core interests,” McConnell said.

As we’ve discussed previously, US empire managers have been talking about how much this war serves US interests ever since it began.

In May of last year Congressman Dan Crenshaw said on Twitter that “investing in the destruction of our adversary’s military, without losing a single American troop, strikes me as a good idea.”

“It is in America’s national security interests for Putin’s Russia to be defeated in Ukraine,” tweeted the perpetually war-horny senator Lindsey Graham.

Last November the imperial war machine-funded think tank Center for European Policy Analysis published an article titled “It’s Costing Peanuts for the US to Defeat Russia,” subtitled “The cost-benefit analysis of US support for Ukraine is incontrovertible. It’s producing wins at almost every level.”

“US spending of 5.6% of its defense budget to destroy nearly half of Russia’s conventional military capability seems like an absolutely incredible investment,” gushed the article’s author Timothy Ash. “If we divide out the US defense budget to the threats it faces, Russia would perhaps be of the order of \$100bn-150bn in spend-to-threat. So spending just \$40bn a year, erodes a threat value of \$100-150bn, a two-to-three time return. Actually the return is likely to be multiples of this given that defense spending, and threat are annual recurring events.”

And of course the mass media have been all aboard the same messaging. A few weeks ago The Washington Post’s David Ignatius wrote an article explaining why westerners shouldn’t “feel gloomy” about how things are going in Ukraine, writing the following about how much this war is doing to benefit US interests overseas:

“Meanwhile, for the United States and its NATO allies, these 18 months of war have been a strategic windfall, at relatively low cost (other than for the Ukrainians). The West’s most reckless antagonist has been rocked. NATO has grown much stronger with the additions of Sweden and Finland. Germany has weaned itself from dependence on Russian energy and, in many ways, rediscovered its sense of values. NATO squabbles make headlines, but overall, this has been a triumphal summer for the alliance.”

I suspect I’ll be periodically reminding my readers of that paragraph — and Ignatius’ parenthetical “other than for the Ukrainians” aside — for the remainder of my writing career.

So on one hand the western political/media class have been hammering us in the face with the message that the invasion of Ukraine was “unprovoked” and that the US and its allies played no antagonistic role in paving the road to this conflict whatsoever, and on the other hand you’ve got all these empire managers enthusing about how much this war benefits US interests.

Those two narratives seem a wee bit contradictory, do they not?

A critical thinker can reconcile this contradiction in one of two ways. First, they can believe that the world’s most powerful and destructive government is just a passive, innocent witness to the violence in Ukraine, and is only benefitting immensely from the war as a complete coincidence. Second, they can believe the US intentionally provoked this war with the understanding that it would benefit from it.

From where I’m sitting, it’s not difficult to determine which of these is more likely.” — [Caitlin Johnstone](#)

21 September 2023: “If Ukraine achieves success during the conflict, it will allow the US to concentrate on China, NATO Secretary General Jens Stoltenberg said.

“If the US is worried about China, then it is necessary to ensure that Ukraine

wins... If Kiev wins, you will have the second largest army in Europe... It will make it easier for you to focus on China and worry less about the situation in Europe”, Stoltenberg said.” —[Sprinter](#)

21 September 2023: “BREAKING: Pentagon has decided to exempt Ukraine operations from a potential shutdown if lawmakers can’t agree on a deal by the end of the month - Politico” —[Insider Paper](#)

21 September 2023: “BREAKING: With opposition in Congress, Biden issues memorandum granting new powers to the Secretary of State to provide \$128 million in assistance to Ukraine without regard to any provision of law within the purview of section 614(a)(1) of the Foreign Assistance Act of 1961.

MEMORANDUM FOR THE SECRETARY OF STATE

SUBJECT: Delegation of Authority Under Section 614(a)(1) and Section 506(a)(1) of the Foreign Assistance Act of 1961

By the authority vested in me as President by the Constitution and the laws of the United States of America, including section 621 of the Foreign Assistance Act of 1961 (FAA), I hereby delegate to the Secretary of State:

(1) the authority under section 614(a)(1) of the FAA to determine whether it is important to the security interests of the United States to furnish approximately \$128 million in assistance to Ukraine without regard to any provision of law within the purview of section 614(a)(1) of the FAA; and

(2) the authority under section 506(a)(1) of the FAA to direct the drawdown of approximately \$128 million in defense articles and services of the Department of Defense, and military education and training, to provide assistance to Ukraine and to make the determinations required under such section to direct such a drawdown.

You are authorized and directed to publish this memorandum in the Federal Register.

JOSEPH R. BIDEN JR

Here is the explanation:

simple terms, this memorandum is a written order from the President of the United States, Joseph R. Biden Jr., to Secretary of State Anthony Blinken. It grants two specific powers to the Secretary of State regarding providing assistance to Ukraine:

1. The first power allows the Secretary of State to decide whether it’s necessary for the security interests of the United States to give approximately \$128 million in assistance to Ukraine. This decision can be made without being restricted by certain laws that might otherwise apply.

2. The second power gives the Secretary of State the authority to access and use approximately \$128 million worth of defense equipment, services, and military training from the Department of Defense to provide assistance to Ukraine. This authority also allows the Secretary of State to make necessary decisions related to this use.

Additionally, the memorandum instructs the Secretary of State to publish this order in the Federal Register, which is a public government record of official actions and

regulations.

In summary, it's a formal document giving the Secretary of State the ability to provide aid to Ukraine and manage related matters, as specified, with certain legal flexibility.” —[Simon Ateba](#)

22 September 2023: “Those struggling to mention War in Ukraine without calling it ‘unprovoked’ need to listen to #NATO Boss @jensstoltenberg explain at our Foreign Affairs Committee that NATO expansion provoked the War - the invasion breached the #UN Charter so it was illegal, it was also provoked.” —[Mick Wallace](#) [includes video]

“The background was that President Putin declared in the autumn of 2021, and actually sent a draft treaty that they wanted NATO to sign, to promise no more NATO enlargement. That is what he sent us. And that was a pre-condition for not invading Ukraine. Of course we didn't sign that. The opposite happened. He wanted us to sign a promise never to enlarge NATO. He wanted us to remove our military infrastructure in all Allies that have joined NATO since 1997, meaning half of NATO, all the Central and Eastern Europe, we should remove NATO from that part of our Alliance, introducing some kind of “B” or second class membership. We rejected that. **So he went to war to prevent NATO, more NATO, close to his borders.** He has got the exact opposite.”

25 September 2023: “US Secretary of Defense Lloyd Austin tells the Russian military to NOT hunt for Abrams tanks:

“The repetition of the situation with German Leopards is unacceptable, when they were hunted, I saw these calls. Play by the rules!” ” —[David Roth-Lindberg](#)

28 September 2023: “Amazing and sad chart from NYT on how virtually nothing has changed from 9 months of tragically deadly and expensive fighting in Ukraine throughout 2023:

Pink zones show parts of Ukraine occupied by Russia since January.

Blue shows gains by Ukraine. Red shows gains by Russia.” —[Glenn Greenwald](#)



30 September 2023: “BREAKING: In what is a major escalation British troops will be deployed in Ukraine for the first time under plans being discussed with military chiefs, new Defence Secretary Grant Shapps confirms.

Army will train Zelensky’s military on the ground and Navy may move into Black Sea.” —[Steve Sweeney](#)

19 October 2023: Ukrainian parliament voted overwhelmingly for initial approval to a law that would ban the Ukrainian Orthodox Church.

4 December 2023: “BREAKING: Joe Biden’s National Security Advisor Jake Sullivan went after House Republicans today saying anyone who votes against funding for Ukraine is making Putin’s success easier. The Biden Admin stands against authoritarianism while Republicans aid and abet authoritarianism.” —[Biden's Wins](#)

My note: Opposition to funding for an illegal war is NOT the same as advocacy for illegal war by the other side.

7 December 2023: “The Biden administration is openly threatening Americans over Ukraine. In a classified briefing in the House yesterday, defense secretary Lloyd Austin informed members that if they don’t appropriate more money for Zelensky, “we’ll send your uncles, cousins and sons to fight Russia.” Pay the oligarchs or we’ll kill your kids.” —[Tucker Carlson](#)

29 December 2023: “The U.S. strongly condemns Russia’s horrific strikes across Ukraine today. As Putin continues his brutal war of aggression, we must support Ukraine in defending itself. Congress needs to act in the new year.” —[US Secretary of State Antony Blinken](#)

9 January 2024: “No. I don’t believe that the Russians are an irrational mindless horde that seeks to conquer all of Europe and anyone who believes that is incredibly stupid and gullible.” —[Cosmonaut Star](#)

Ultrix

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise

See: UMES — operating system

unaffected

keyword: VHDL reserved key word

unconventional pistol

noun “A pistol or revolver that does not have a rifled bore and has a barrel length of less than 18 inches or an overall length of less than 26 inches (Penal Code Section 17270)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

undetectable firearms

noun “A firearm designed in such a way that when the grip, stock, and magazine have been removed, it is not detectable by x-ray (Penal Code Section 17280)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version

6.7, California Commission on Peace Officer Standards and Training]

undetectable knife

noun “A knife designed in such a way that it is undetectable by x-ray and capable of ready use as a stabbing weapon (Penal Code Section 17290)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

undef

keyword: Ruby reserved word

undefined

keyword: JavaScript property

unemployment

Joe Biden brags about his low unemployment numbers. What he doesn't tell you is how he achieved them.

Joe Biden threw more than 10 million Americans off the unemployment rolls in a five day period.

Joe Biden also changed the rules so it became much more difficult to be eligible for unemployment.

The actual number of percentage of Americans who are unemployed is the greatest since the Great Depression.

12 September 2023: “I think the problem that we've had is that people decided they didn't really want to work so much anymore through COVID and that has had a massive issue on productivity. Tradies have definitely pulled back on productivity. They have been paid a lot to do not too much in the last few years and we need to see

that change. **We need to see unemployment rise. Unemployment has to jump 40-50% in my view. We need to see pain in the economy. We need to remind people that they work for the employer, not the other way around.** I mean, there's been a systemic change where employees feel the employer is extremely lucky to have them as to the other way around. So it's a dynamic that has to change. We've got to kill that attitude and that has to come through hurting the economy, which is what the whole global - the world - is trying to do. The governments around the world are trying to increase unemployment to get that to some sort of normality and we're seeing it. I think every employer now is seeing it. I mean there is definitely massive layoffs going off. People might not be talking about it but people are definitely laying people off and we're starting to see less arrogance in the employment market and that has to continue because that will cascade across the costs balance.” —Property developer, CEO and Founder Tim Gurner, Gurner Group, quoted in video tweeted by [Ken Klippenstein](#); video included

unescape

keyword: JavaScript windows depreciated function

ungetc

function: C stdio.h library function: stands for UN-GET Character

ungulate

“Ungulates include hoofed animals, such as deer, sheep, goats, pigs, buffalo, elephants and giraffes (Figure below). These mammals use their hoofs to sustain their whole body weight while moving. Hoofs are formed by a thick nail rolled around the tip of the toe.” —[Groups of Mammals](#)

unicorn

The unicorn is the national animal of Scotland. In Celtic mythology, the unicorn is a symbol of purity and innocence.

union

30 August 2023: “Reminder: jobs don’t just “go away.”

They’re shipped overseas by people who run large, multinational corporations when they don’t want to pay their workers fair wages.

There is greed in this scenario, but it’s not from workers.” —[Nina Turner](#)

union

keyword: C keyword: data type

keyword: Objective-C reserved word

keyword: SQL reserved word (ANSI, Oracle, z/OS)

unique

keyword: SQL reserved word (ANSI, Oracle)

unit

keyword: COBOL reserved word (z/OS)

United Kingdom

19 March 2024: “This is what we like to see!

There’s a reason the IWW isn't in the TUC - and a reason when our members are in a TUC union, are part of these rank-and-file movements to hold the bureaucracy to account!

NHS union members step up campaign to reject paltry pay deal.” —[London IWW Union](#)

units

keyword: VHDL reserved key word

University of Michigan Executive System (UMES)

operating system

Proprietary OS by IBM

for the IBM 704, 709, and 7090 — [Wikipedia: List of operating systems](#)

Unix System III

operating system

Proprietary OS by Bell Labs.

A version of UNIX Time-Sharing System v7. — [Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v7

Unix System IV

operating system

Proprietary OS by Bell Labs.

A version of UNIX Time-Sharing System v7. — [Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v7

Unix System V

operating system

Proprietary OS by Bell Labs.

A version of UNIX Time-Sharing System v7. Releases include 2.0, 3.0, 3.2, 4.0, and 4.2. — [Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v7

UNIX Time-Sharing System v1

operating system

Proprietary OS by Bell Labs.

UNIX Time-Sharing System v2

operating system

Proprietary OS by Bell Labs.

UNIX Time-Sharing System v3

operating system

Proprietary OS by Bell Labs.

UNIX Time-Sharing System v4

operating system

Proprietary OS by Bell Labs.

UNIX Time-Sharing System v5

operating system

Proprietary OS by Bell Labs.

UNIX Time-Sharing System v6

operating system

Proprietary OS by Bell Labs.

Versions include MINI-UNIX, PWB/UNIX, USG, and CB Unix. —[Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v7

operating system

Proprietary OS by Bell Labs.

Includes Unix System III, Unix System IV, and Unix System V. Almost all modern versions of UNIX are derived from this version. —[Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v8

operating system

Proprietary OS by Bell Labs.

UNIX Time-Sharing System v9

operating system

Proprietary OS by Bell Labs.

UNIX Time-Sharing System v10

operating system

Proprietary OS by Bell Labs.

unknown

keyword: SQL reserved word (z/OS)

unless

keyword: Ruby reserved word

unlink

function: C library function: stands for UNLINK file from directory

[unnamed]

operating system

Unnamed proprietary embedded operating system (NetBSD variant) by Apple for the Airport Extreme and Time Capsule. — [Wikipedia: List of operating systems](#)

unset()

keyword: PHP reserved word (this is a reserved word and not a function)

unsigned

keyword: C keyword: data modifier

keyword: Objective-C reserved word

unstring

keyword: COBOL reserved word (z/OS)

untaint

keyword: JavaScript windows depreciated function

until

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: Ruby reserved word

keyword: VHDL reserved key word

up

keyword: COBOL reserved word (ANSI, Oracle, z/OS)

update

keyword: SQL reserved word (z/OS)

upon

keyword: COBOL reserved word (z/OS)

upper

keyword: SQL reserved word (z/OS)

upper_mb

keyword: SQL reserved word (z/OS)

Uranus

Uranus is the coldest planet in our solar system despite being closer to the Sun than Neptune.

urban rain

“In heavily populated areas, it is much more likely to rain on a Saturday than on Monday because of the pollution that builds up over a week of commuter traffic.” — Alexa

usage

keyword: COBOL reserved word (z/OS)

use

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: PHP reserved word

keyword: VHDL reserved key word

user

keyword: SQL reserved word (ANSI, Oracle)

Userkaf

“The head of King Userkaf, the first king of the 5th dynasty. The cult of the sun god Ra gained new importance under his reign. He built a new kind of temple dedicated to the cult of the sun at Abusir where this statue was found. Here he is wearing the red crown of Lower Egypt” —[Natalie Hilder](#)



USG

abbreviation

operating system

Proprietary OS by Bell Labs.

A version of UNIX Time-Sharing System v6. — [Wikipedia: List of operating systems](#)

UNIX Time-Sharing System v6

using

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

Utah

12 October 2023: “#Utah can vote for #PeaceNotWar by putting Greens on your 2024 ballot

[Green Party of Utah Ballot Access](#)” —[Green Party Ballot Access](#)



Shout it from the mountain tops:

GREEN PARTY ELEVATED!

**Helps us elevate our ballot access status to
“complete” by the November 30 deadline!**

greenpartyofutah.org greenpartyutah@gmail.com

Hand-drawn capital V and lowercase v in a sketchy, black ink style.**V**

ASCII: 56 hex

UNICODE: LATIN CAPITAL LETTER V

v

ASCII: 76 hex

UNICODE: LATIN SMALL LETTER V

vaccine

The mRNA COVID “vaccine ” did do some good and did save some lives.

By relabelling the mRNA therapy for COVID into “vaccine ”, because the large pharmaceutical compnies could bypass normal testing procedures to rush to market, all of the problems of the inadequately tested “vaccine ’ have poisoned the word vaccine in its true meaning, causing a small vocal anti-vax movement to become mainstream.

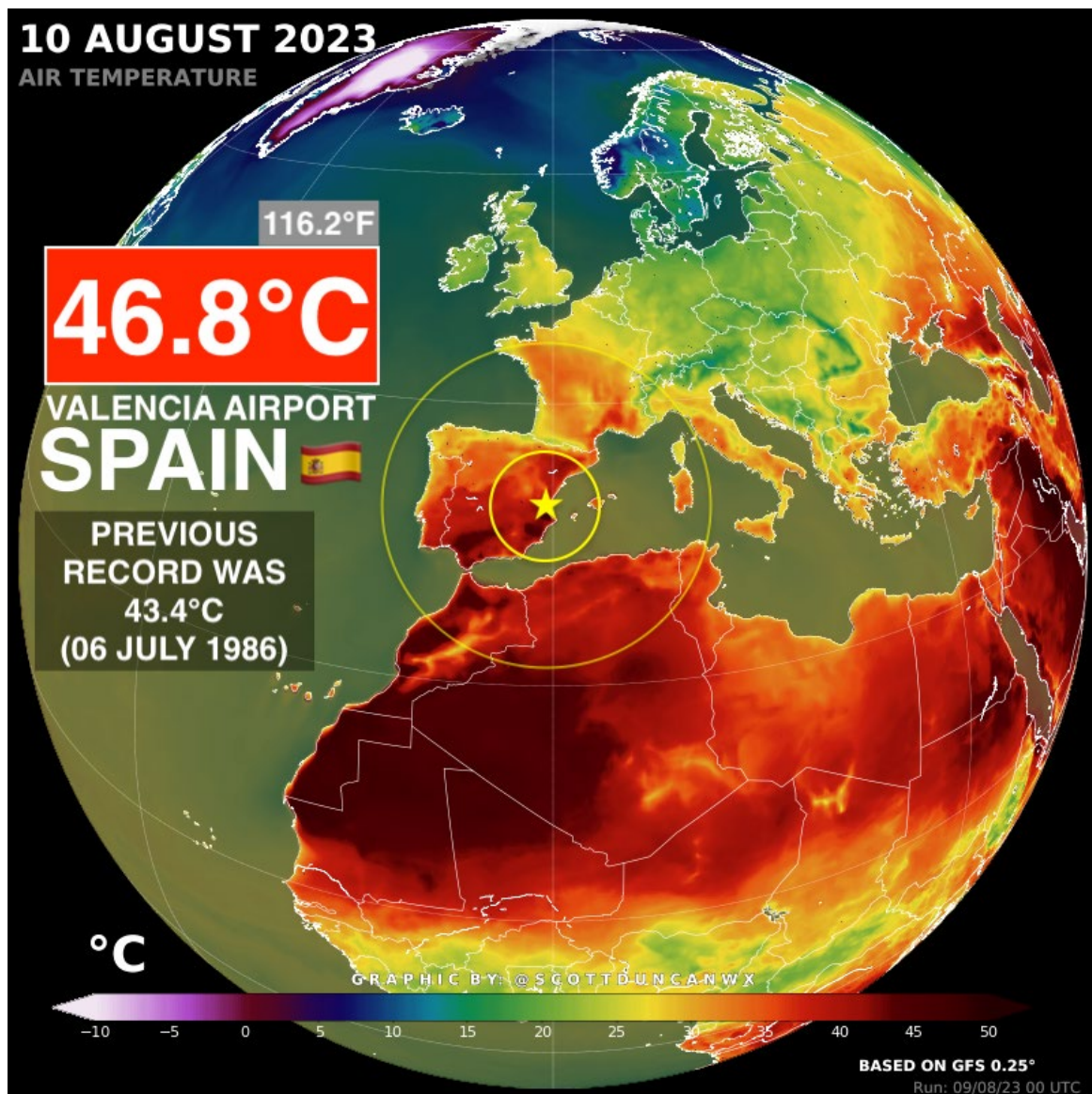
validate

keyword: SQL reserved word (Oracle)

Valencia, Spain

10 August 2023: “BREAKING: Valencia has just scorched its previous heat record by a shocking +3.4°C

The new provisional record stands at 46.8°C (116.2°F). This is a huge record-break.” —[Scott Duncan](#)



See: valine

Valleta, Malta

13 December 2023: “On December 13, 1974, Malta became a republic with the approval of a new constitution and the election of a president as head of state. It is still

a member of the British Commonwealth of Nations. Pictured is the capital, Valletta, the European Union's smallest capital and a UNESCO World Heritage Site. With 320 monuments within .55 sq km (0.21 sq mi), it is one of the most- concentrated historic areas in the world and is noted for its fortifications along with the beauty of its Baroque palaces, gardens, and churches.” —CIA World Factbook (material that expires after 30 days)



value

keyword: COBOL reserved word (z/OS)

valueOf

keyword: JavaScript method

values

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (ANSI, Oracle, z/OS)

Eddie Van Halen

“Rock stars come and go. Musicians play until they die.” —Eddie Van Halen

var

keyword: JavaScript reserved word

keyword: PHP reserved word

Varanasi

Varanasi, India, is about 3,000 years old.

varchar

keyword: SQL reserved word (ANSI, Oracle, z/OS)

varchar2

keyword: SQL reserved word (ANSI, Oracle)

variable

keyword: VHDL reserved key word

varying

keyword: COBOL reserved word (z/OS)

keyword: SQL reserved word (z/OS)

See: .vcd — file extension

See: .vcf — file extension

Venus

A day on Venus (243 Earth days) is longer than a year on Venus (224.7 Earth days).

Gore Vidal

“Every four years the naive half who vote are encouraged to believe that if we can elect a really nice man or woman President everything will be all right. But it won’t be.” —Gore Vidal

“There is only one party in the United States, the Property Party—and it has two right wings: Republican and Democrat. Republicans are a bit stupider, more rigid, more doctrinaire in their laissez-faire capitalism than the Democrats, who are cuter, prettier, a bit more corrupt - until recently... and more willing than the republicans to make small adjustments when the poor, the black, the anti-imperialists get out of hand. But, essentially, there is no difference between the two parties.” —Gore Vidal

video games

1 September 2023: “BREAKING: SAG-AFTRA members are about to vote on a Video Game strike authorization.

After a year of negotiation the union says the major video game companies have failed to address the needs of actors involved.

So they’re calling for a second simultaneous strike.” —[More Perfect Union](#)

view

keyword: SQL reserved word (ANSI, Oracle)

viewer discretion

“What exactly is ‘viewer discretion’? If viewers had discretion, most television shows would not be on the air.” —George Carlin

violence

“The greatest purveyor of violence in the world: My own government, I can not be silent.” —Martin Luther King, Jr.

Violet

keyword: HTML color name



violin

Q: How many 2nd violinists does it take to change a light bulb?

A: None, they can't get up that high.

vision

“Normal” human eyesight is 20/20 vision. Bald eagles have 20/4 or 20/5 vision, meaning they can see about four to five times farther than the average human.

SPL Vitalizer Magic

date: “SPL Vitalizer Magic

Interesting thing happened to me. A few years ago I been playing with SPL Vitalizer (plugin available from Plugin Alliance) and noticed how good is the stereo expander on there.

Then I met a few like really big engineers who also use this device and also for the stereo expander.

Turned out, it has some unique widening circuit.

I would love to say “ears don’t lie”, but sadly they often do

Anyway, when you see a few unrelated experienced people use the same thing for the same purpose, something must be right about it.” —[Nathaniel W.](#)




VMS

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, and Hewlett-Packard

Now by VMS Software Inc. for the VAX mini-computer range, Alpha, and Intel Itanium i2 and i4; later renamed OpenVMS — [Wikipedia: List of operating systems](#)

See: .vob  — file extension

vocals

30 August 2023: “vocal cheat sheet” — [Solar Heavy](#)



12 September 2023: “vocal cheat sheet” — [Solar Heavy](#)



12 September 2023: “It’s good to start with a slower attack and faster release depending on the track! From there you can always set those knobs according to ears! Maybe start with a 4 to 1 ratio and then see how it feels like with the track!”

—[Duh_FrankenStein](#)

24 September 2023: “vocal cheat sheet” —[Solar Heavy](#)

GET PERFECT VOCALS!

HERE'S HOW TO ACHIEVE THE BEST TAKE:

Record multiple takes and focus on how you pronounce each phrase.

Take 1	Take 2
Take 3	Take 4

Go through each take and pick the best parts and cut the rest from them.

1	2	4	3
3	4	2	1

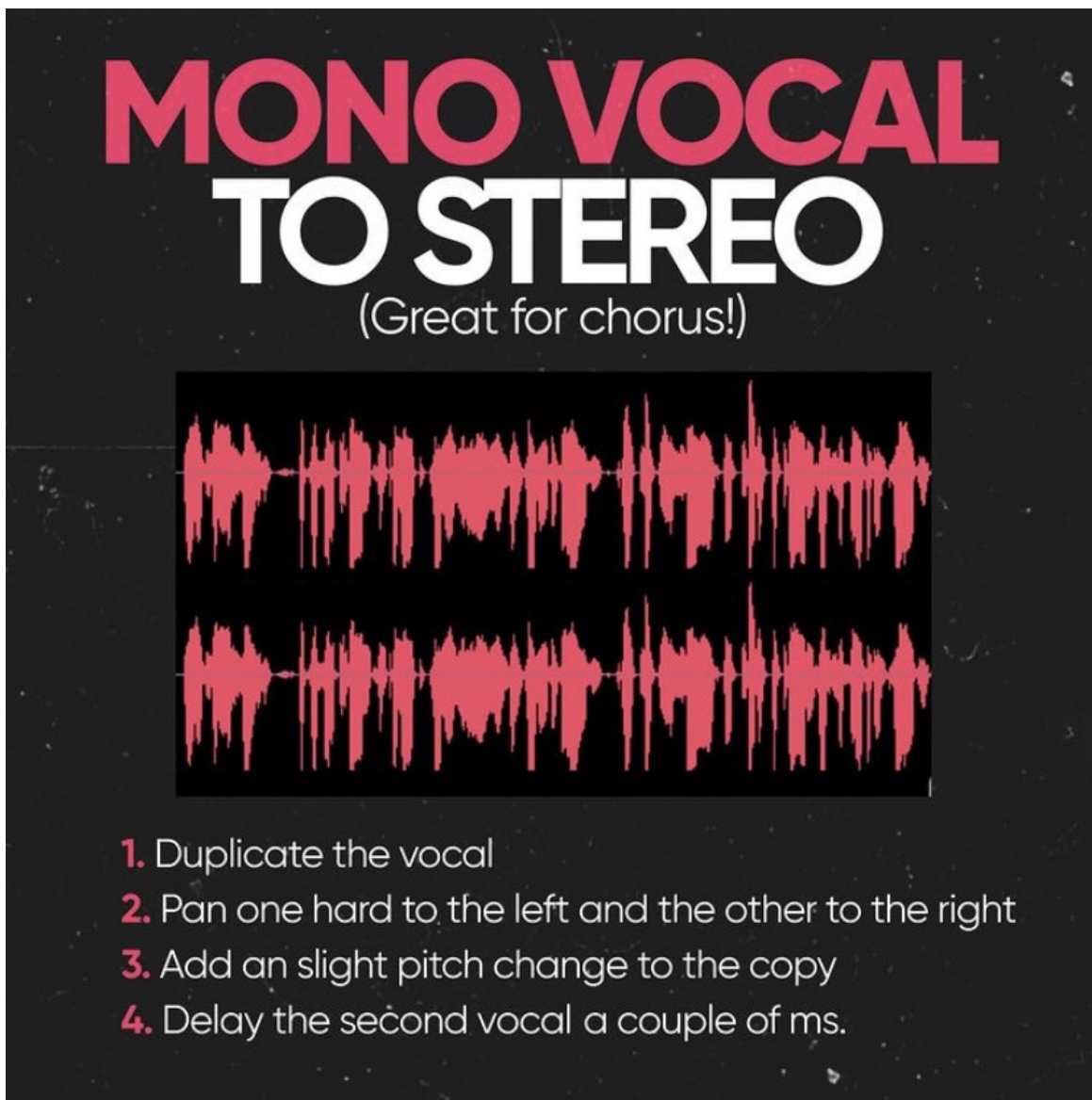
Now merge all the parts you cut from each take into one perfect take.

1	2	3	4	3	4	2	1
---	---	---	---	---	---	---	---

4 October 2023: “vocal mixing cheat sheet
 yeah, autotune at the end is just to see whos paying attention lmao
 Auto tune first because you’re correcting the source material - the singer, then
 anything after” —[Solar Heavy](#)

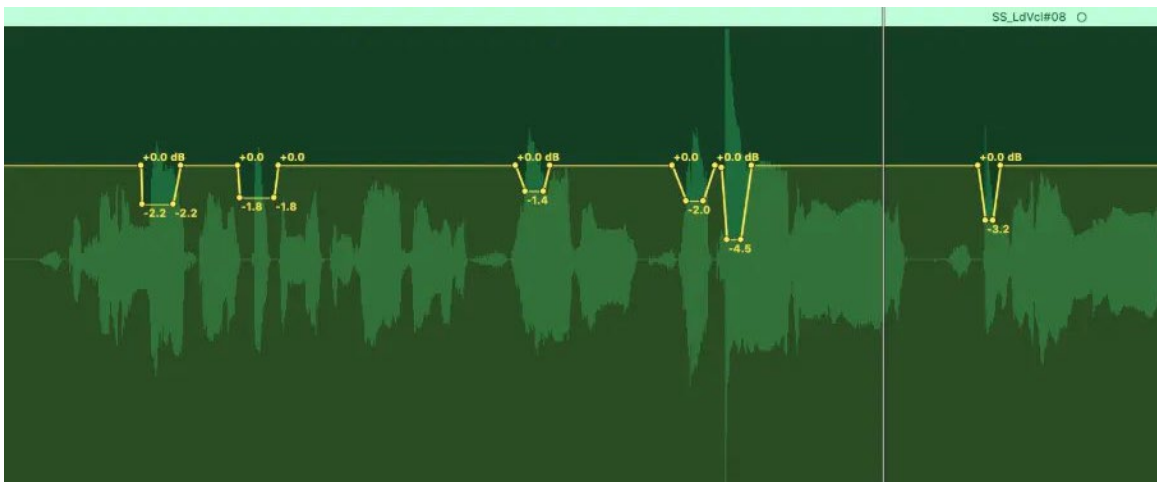


12 November 2023: “vocal cheat sheet” — [Solar Heavy](#)



12 November 2023: “5. Collapse mix to mono and check that vocal still sounds correct.” —[Geoff Swan](#)

6 December 2023: “Why your vocals don’t sit in the beat?
Because you (probably) doing it wrong initially. You rely on your compressors.
But your vocals should already sit in the mix before compression
How? Clip gain automation.” —[Nathaniel W.](#)



6 December 2023: “Is the vocal rider plug-in better than no clip gain automation?”
—[Khy](#)

6 December 2023: “On some vocals may be. That are not too dynamic.
If you hear it working then it makes worse. If it works transparently and level is more balanced now then it became better.” —[Nathaniel W.](#)

15 December 2023: “How to get big vocals?
+ Bonus tip for artists
First of all, you shouldn’t neglect clip gain automation. And I’ll explain why.
For vocals to perceive as “big” they should have good dynamic range. No hard compression.
But they should sit in the beat right?
So you reach out to your clip gain automation and make them sit in the beat before compression.
Then, don’t cut the lows, or cut very carefully. These low frequencies directly correlate to how “big” is the sound. Noticed how if you talk closely to the microphone the sound becomes “bassy” and “big”? Not a coincidence. However, you may still will need to cut the low mids a bit to fit vocals in the beat better.
To avoid clashing vocals with bass, sidechain those low frequencies from bass and kick. Even with a mixed beat, you can sidechain vocals from the low frequencies.
Also, compress very gently. Taming peaks first and then aim at +/- 1 db of compression. I even used 0.5 db after good clip gaining, mostly getting the character out of compressor.
Use the most beautiful EQ you have to boost the very high frequencies. These details in highs will also make the vocals to seem bigger.
Don’t forget de essing. Have mercy to your listeners and don’t shoot them with “big” esses.

On auxes, use short reverb (300-500ms), use parallel compression and chorus.
Long reverb can be used as well but that’s not helping, use it just if you need, but not too much of course. With long reverb you also can sidechain it from dry vocals so this reverb is not loud when vocals play, keeping them bigger, but becomes louder

during empty spaces, filling it with a nice tail.

And that's it, your vocals are big now.

ÑÑÑÑÑ-

Bonus tip:

If you are an artist, you can record yourself closer to the microphone (not kissing with it tho) with lower gain. Your vocals initially will be big. And that's the best approach.” —[Nathaniel W.](#)

3 January 2024: “How to keep vocals consistent?

You probably have vocals that sound present through the whole mix but some frequency range jumps out of the mix time to time

Some words sound boomy, or vocalist shouts some of the long notes, making the midrange unpleasant

Great decision will be to use multiband compression and compress only the frequency range that jumps out, keeping the vocals presence and increase consistency” —[Nathaniel W.](#)

11 January 2024: “vocal cheat sheet” —[Solar Heavy](#)

VOCAL TIP



If your vocal is lacking body or power, try adding an additional vocal layer an octave down. To do this, simply duplicate your vocal, then pitch it down 12 semitones. You can then lower the volume and EQ the vocal so that it gels together with your existing vocal.

vocal chain

26 May 2023: “Vocal chain cheat sheet” — [Solar Heavy](#)



26 May 2023: “there’s so many different vocal chains that work. De-essing before and after compressing. why would you want to limit the vocals before compressing them? Also I personally don’t use saturation I use analog style pres eq and compressors that add saturation throughout the chain” —[JUSTIN](#)

26 May 2023: “first of all, FIRST OF ALL, always manually duck all the weird clicks, random loud parts, t’s, k’s, ch’s, p’s, also the s’es if ur feeling romantical, then do all the rest.

It’s a tedious job but it saves a lot of time of work later when it comes to de-essing eq-ing and stuff.

cut all the “not singing” parts out, saves time when u start to compress vocals and all of that weird sound comes out between pauses of the singer,

U don’t even need a gate at that point, AND the vocal will feel better to work on.”
—[Morgan](#)

vocal editing

11 December 2023: “Vocal editing tip

On any recording, by any vocalist, breaths look pretty much the same on the audio wave

Low level, not dynamic, short sounds in between the phrases

Knowing this, you can edit them quicker.” —[Nathaniel W.](#)



vocal eq

23 April 2023: “Vocal EQ cheat sheet

For main vocal, this would be a great starting point to then adjust, but for those who are more experienced you'll naturally apply these things as your mixing and what feels right to the song at hand” —[Solar Heavy](#)

VOCAL EQ

STARTING POINT



- High pass >60Hz to remove unnecessary lows and rumble.
- Cut 200Hz slightly with a wide q to reduce muddy frequencies.
- Boost 500Hz to amplify vowels and make them cut through.
- Cut 5KHz to reduce the harsh sibilances.
- Engage the dynamic EQ mode in FF-Pro q3 so that my eq is smart and cuts only when the sibilances hit the threshold.
- Boost >8k with high shelf filter to add some air

3 September 2023: “vocal eq cheat sheet” — [Solar Heavy](#)

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11 November 2023: “vocal eq cheat sheet” — [Solar Heavy](#)



10 January 2024: “vocal eq cheat sheet” — [Solar Heavy](#)

VOCAL EQ DOS & DON'TS



DOS

- ✓ Roll off your low end more gradually, to preserve the natural elements.
- ✓ Smaller and wider dips in the low-mid and high-mid range will control boxiness and harshness, while maintaining a vocal's true tone.
- ✓ A Subtle boost in the high-end will suffice. If not, try more later after you compress.

DON'TS

- ✗ Steeply cutting out all the low end. That will make your vocal sound thin.
- ✗ Taking surgical EQ cut too seriously. This can make your vocal sound unnatural.
- ✗ Boosting high-end at once. You can always add more later (if needed).



16 January 2024: “Smooth high end on vocals for free

Most very pleasing sounding analog equalizers (and their plugin alternatives) have a high shelf curve that doesn't look like standard shelf that you normally use

However, you can make a shelf like this in any equalizer by changing the Q factor

Try making this shelf, then start from highest frequencies, boost a fair amount, and then move lower until you catch the right sound for you

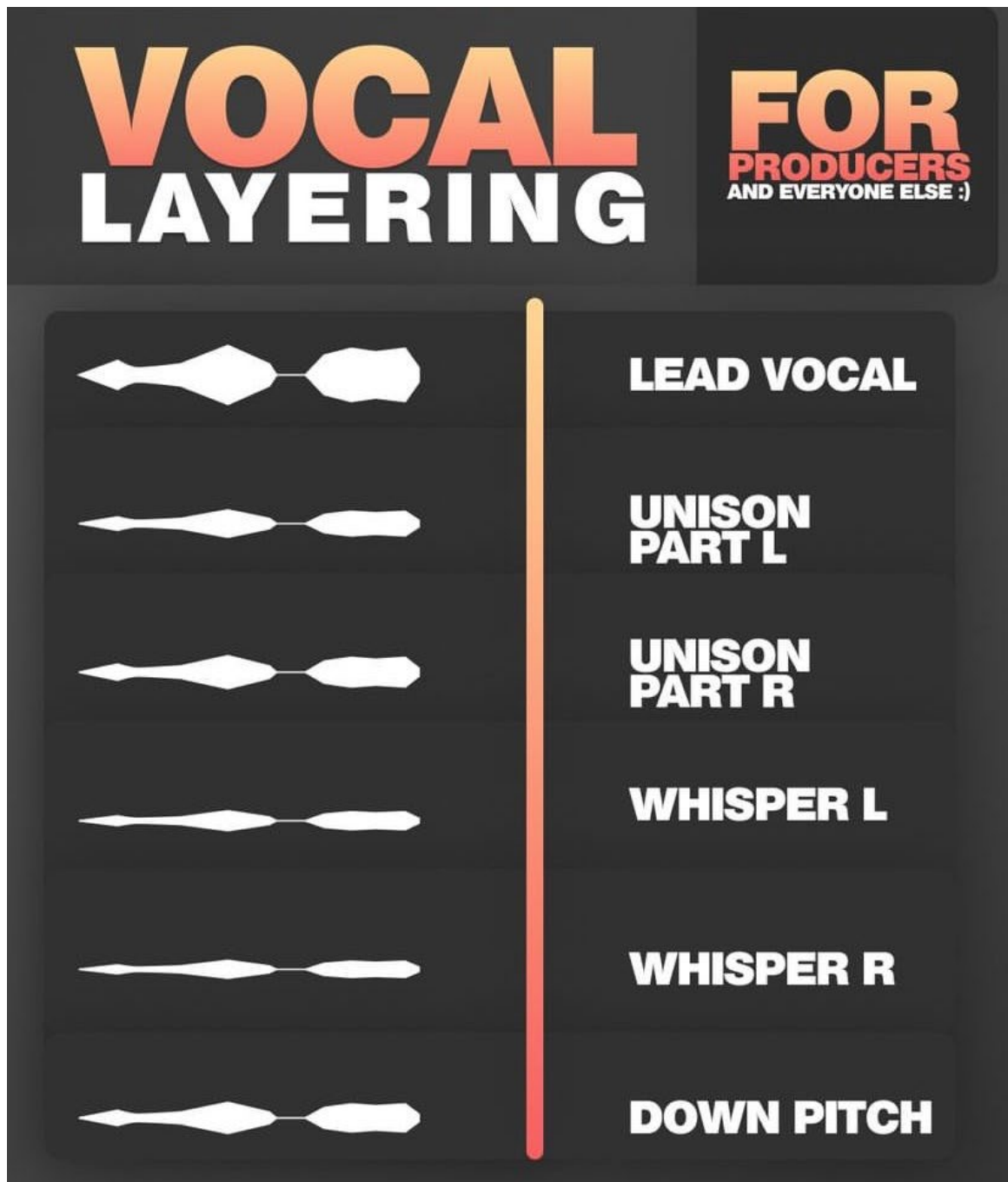
This will work not only on vocals, but on any source where you want to boost high frequencies smoothly

It will sound much less harsh” — [Nathaniel W.](#)

See: EQ

vocal layering

2 October 2023: “vocal layering cheat sheet” — [Solar Heavy](#)



vocal mixing

25 December 2023: “Pro vocal mixing tip

Add some different equalization with different EQ device to your vocals in the hook

Some broad tonal changes that won't destroy the sound, yet make it slightly different

This will make the difference between the hooks and verses more pronounced and

your mix will become more interesting

When you can't instinctively understand the switch between hook and verse it sounds weird.

Think about it.” — [Nathaniel W.](#)

27 December 2023: “Pro vocal mixing tip

You can use transient shaper to get rid of nasty mouth clicks, if you don't own tools like RX Mouth De-Click

I like how “oeksound spiff” sounds for this purpose” — [Nathaniel W.](#)



27 December 2023: “I use the Transient Shaper built into KONG from Reason. It works, even if it does look a little janky in the Rack using a drum kit instrument as an effect. Haha” — [MAJIKstudios](#)

29 December 2023: “Pro vocal mixing tip

You can experiment with parallel saturation.

Make a pretty aggressive saturation on the aux channel, and blend it slightly with original signal.

Can help your vocals to stand out yet not sounding too loud” — [Nathaniel W.](#)

2 January 2024: “Pro vocal mixing tip

Technique that I developed for one of the songs I mixed

1. Create two ping pong delays, 1/4 note
2. Make your first delay exactly two repeats, and narrow the width to like 50%
3. Then send it to another aux channel with another ping pong delay, that is using the same settings
4. On this second channel, use full width, and cut slightly more lows and highs

As a result, you will create more complicated delay that not only jumps between L and R channels, but also moves further from center after 2 repeats

This will add interesting movement to your mix” — [Nathaniel W.](#)



10 January 2024: “Pro vocal mixing tip

You can try using different reverbs for L and R channels, with same time characteristics

That way, your reverb will less sum to the middle and going to sound more wide and spacial, without using stereo wideners that damage the phase

I wouldn't say it's “better” or “worse”. It's a technique that you might want to use, and might not.

In most cases you probably will be good just using the reverb as usual.

Sometimes gentle widening won't hurt your reverb, but if you hear that you want it much more spacial, better to use this trick rather than push the widener more and more” — [Nathaniel W.](#)

15 January 2024: “Improve your vocal mixing skills

This is the technique I developed and applied for many songs and it helped me a lot, especially when I had less experience

This will help you to learn vocal mixing faster. Here is the thing:

After you did all the vocal mixing and added all your fancy plugins and reverbs and everything

Just go back to your vocal chain, and turn off EQ

Just turn it off

In many, many cases you'll notice that your vocals started to sound better at something. Fuller, richer, more natural.

Now keeping all the other processing turned on, do EQing again, applying ONLY what's really necessary and fixing what makes your mix worse

You can do it on any finished mix.

Just try it.

You can A/B with your previous settings and if you are not a professional engineer,

I can guarantee you will choose newer settings

You would be surprised how simple are equalizations we do. And this technique allows you to learn that.

With more experience, you will start EQing like that right away” —[Nathaniel W.](#)

17 January 2024: “Why your vocals don’t sit in the beat?

A few reasons why it can happen.

1. Instrumental is oversaturated spectrally. Too much information in the mids. Use gentle EQ.

2. You didn’t specifically paid attention how vocals interact with bass and drums: particularly kick, snare, hats. Tips will be in the end*

3. Your vocals are not cleaned well. Some mouth clicks, mic pops, sibilants jump out.

4. Your vocals are too dynamic and you can’t fit them using a compressor. Do the clip gain automation.

5. The space you built doesn’t fit the instrumental.

6. You didn’t pay attention how instruments interact with vocals.

7. The beat is heavily limited. Ask the producer for a version with headroom. If he won’t provide it, don’t worry. Just change the producer.

Bonus tip: Don’t try to pan instruments away from conflicting with vocals. Use EQ. Remember, your mix shouldn’t sound messy in mono. That way, it’ll sound much better in stereo. Just compare if you doubt.

*Kick and bass should cut through vocals. Snare should either cut through or let the vocals sound on top smoothly. Hats shouldn’t blend too much with vocals high end.” —[nathaniel W.](#)

18 January 2024: “My lead vocal mixing step by step process

1. Cleaning

2. Tuning

3. Clip gain automation

4. Vocal chain

5. Volume automation

6. Sidechain from low end

7. Sidechain to melody, sidechain to reverb if needed

8. Aux channels (reverbs, delays, effects, parallel compression etc)

9. Summing with backing vocals (I use limiter there and possibly soothe2)

10. Sidechain from snare here if needed (mid channel)

11. Summing with auxes, final level control

12. Summing with instrumental, master bus processing” —[Nathaniel W.](#)

vocal stacking

10 October 2023: “vocal stacking cheat sheet” — [Solar Heavy](#)



void

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

volatile

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

voting rights

27 November 2023: “The “a vote for Joe Biden is a vote for democracy” loses a bit of steam after Democrats held the House, Senate, and White House and allowed the filibuster and parliamentarian stand in the way of passing voting rights legislation.” —[Nina Turner](#)

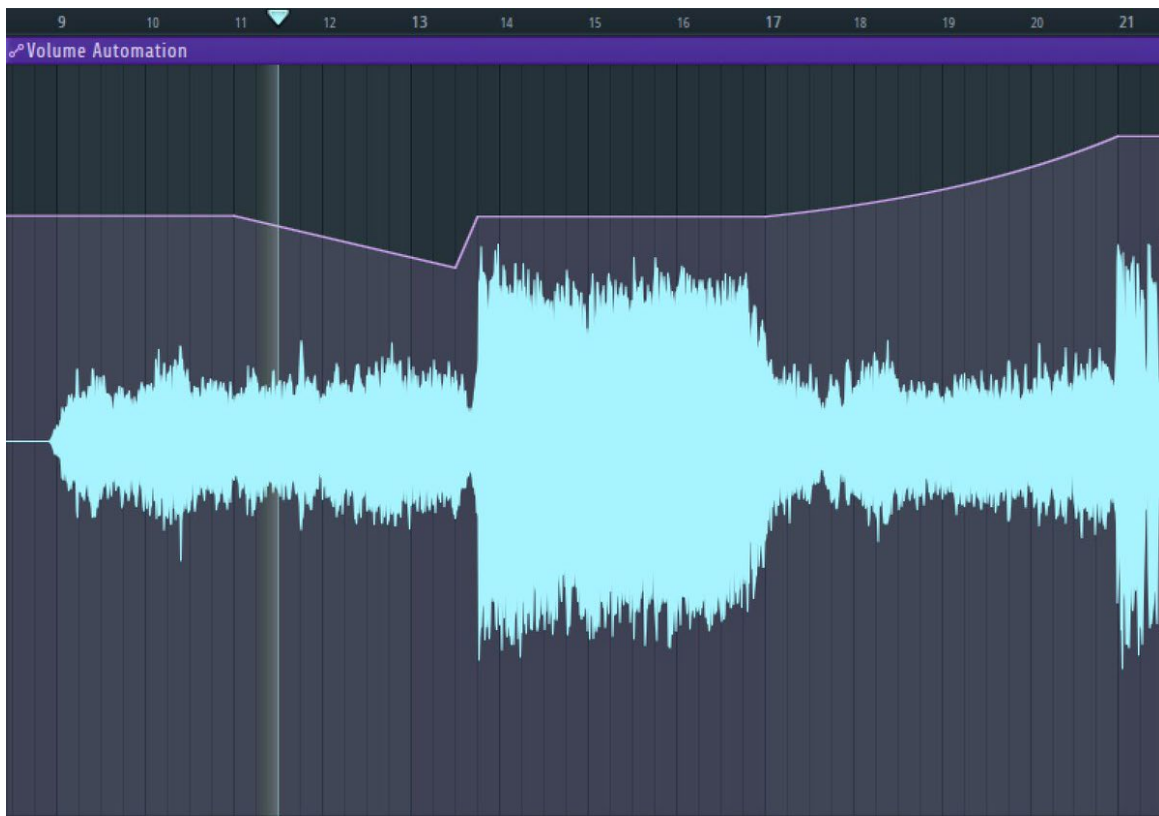
23 November 2023: “US appeals court guts Voting Rights Act
With the Eighth Circuit ruling, a new stage in the assault on the Voting Rights Act and democratic rights more broadly has been initiated.” —[Barry Grey](#); article at [World Socialist Web Site](#)

Voltaire

“Prejudice is an opinion without judgment.” —Voltaire

volume automation

21 January 2024: “Pro tip: The solution to a track that gets too loud at times, too quiet at others, but otherwise sounds great dynamically, is volume automation—not more compression.” —[Eduard](#)



21 January 2024: “Wouldn’t it be good practice to combine the two? Clip gain the recorded incoming audio so that it’s relatively leveled, run it through a compressor for the desired sound, and then use volume automation for the dynamics and stuff in the mix?” —[kneverset](#)

21 January 2024: “That’s exactly right.” —[Eduard](#)

Kurt Vonnegut

“We’ll go down in history as the first society that wouldn’t save itself because it wasn’t cost-effective.” —Kurt Vonnegut

Von Neumann and Goldstine graphing system

programming language

year created: 1946

created by: John von Neumann and Herman Goldstine

predecessors: ENIAC coding system

voting rights

7 July 2022: The North Carolina Board of Elections voted on straight party lines (Democrats winning) to forbid certification of the Green Party for the ballot.

See: `.vsdx`

VSTs

2 December 2023: “vst cheat sheet” — [Solar Heavy](#)



2 December 2023: “i feel like the big W about serum is the absolutely immense amount of presets, which i doubt are available on vital. correct? i only ask because i do often say how much i love serum when friends want to buy a VST, but if i can give them a free alternative, thatd be cool.” —[thebugsarebad](#)

2 December 2023: “Idk dude izotope vinyl and rc 20 are radically different. Hopefully I donÕt mess this up for anyone else but I found a way to run rc20 for free in ableton. Get the demo. Let it expire. It will disables the gui but you can access the controls in the fx panel. freeze track. Prosper” —[Death Trap 9iHI](#)

Vulcan O/S

abbreviation

operating system

Proprietary OS by Harris Corporation

for Harris' Computer Systems (HCX) — [Wikipedia: List of operating systems](#)

A hand-drawn illustration of the letters 'W' and 'w' in a rough, sketchy style. The 'W' is capital and the 'w' is lowercase, both rendered in black ink.

W

ASCII: 57 hex

UNICODE: LATIN CAPITAL LETTER W

w

ASCII: 77 hex

UNICODE: LATIN SMALL LETTER W

wait

keyword: VHDL reserved key word

WAITS

abbreviation

operating system

Proprietary OS by Digital Equipment Corporation (DEC). Later owned by Compaq, Hewlett-Packard, and Hewlett Packard Enterprise.

for the PDP-6 and PDP-10 — [Wikipedia: List of operating systems](#)

walela

Walela means hummingbird in Cherokee.

walking

Walking before and after meals improves digestion and reduces blood sugar spikes.

wallet gun

noun “A firearm mounted or enclosed in a case resembling a wallet designed to be, or capable of being, carried in a pocket or purse (Penal Code Section 17330)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

war

“War: a massacre of people who don’t know each other for the profit of people who know each other but don’t massacre each other.” —Paul Valéry

“Once weapons were manufactured to fight wars. Now wars are manufactured to sell weapons.” —Arundhati Roy

“In great empires the people who live in the capital, and in the provinces remote from the scene of the action, feel, many of them scarce any inconveniency from the war; but enjoy, at their ease, the amusement of reading in the newspapers the exploits of their own fleets and armies. To them this amusement compensates for the small difference between the taxes which they pay on account of the war, and those which they had been accustomed to pay in time of peace. They are commonly dissatisfied with the return to peace, which puts an end to their amusement, and to a thousand visionary hopes of conquest and national glory, from a longer continuance of the war.” —Adam Smith, *Wealth of Nations* 1776

Donald Trump ordered the assassination of Iranian Major General Qasem Soleimani, withdrew the US from the Intermediate-Range Nuclear Forces (INF) Treaty, and ramped up the use of drone strikes (which primarily kill innocent,

unarmed, noncombatant civilians) by more than four times (400+%) Obama.

“If we can find the money to kill people, we can find the money to help people.” — Tony Benn

“They’ll say we’re disturbing the peace, but there is no peace. What really bothers them is that we are disturbing the war.” —Howard Zinn

“Once weapons were manufactured to fight wars. Now wars are manufactured to sell weapons.” —Arundhati Roy

I counted the wars listed in the Wikipedia list of US wars. Then I looked at a map showing the conflicts the US is currently involved in. And then looked up if there was a listing for a war in that country. I totalled the number of wars the US is actually involved in.

I then looked up the number of combat operations and Special Forces missions the DoD lists.

I then compared the US wars to the list of genocides on Genocide Watch.

I then Looked up the information on the CIA’s torture program, starting with the report by the Senate select committee on intelligence and then from other sources.

Joe Biden’s total is 23 wars (by my count, six by the official count), 65 combat operations, SOF missions in 134 countries, 2 genocides (he reached a high of three genocides), and 50 torture operations in 28 states.

The nations with the next biggest number of wars (using the Wikipedia lists):

Biden’s 23 wars are in: Afghanistan (Biden replaced almost all fo the regular duty military with CIA operatives and provate contracted mercenaries), Cameroon, Central African Republic, Eritrea, Ethiopia, Haiti, Iraq, Kenya, Libya, Mali, Mauritania, Nagorno-Karabakh Autonomous Region, Niger, Pakistan, Philippines, Saudi Arabia, Somalia, South China Sea, Syria, Tunisia, Ukraine, and Yemen

Before you coaim that the US is not at war in Ukraine consider this information from the Biden administration: US four star General Jack Keane said, “For just \$66-billion we bought ourselves a war with Russia where Americans are not dying, but Ukrainians. That’s an excellent deal.” In the summer of 2022, Joe Biden said that the US had covert forces in Ukraine. The US already had combat units in Ukraine prior to 24 February 2022. Those troops were temporarily withdrawn, but replacements returned with the claimed role of training Ukrainians on US weapons and selecting targets for the Ukrainian military.

4: Russia’s wars: Central African Republic, Mali, Syria, Ukraine

3: Pakistan (Alvi), Nigeria (Buhari), Chad (Déby), Philippines (Marcos), India (Murmu), Russia (Putin)

2: Niger (Bazoum), Mali (Goila), UK (Sunak/Charles III), Ethiopia (Zewde)

Go ahead and tell me that Putin is the world's worst warmonger and that Biden is squeaky clean. Or that Donald Trump before him was somehow anti-war.

For those parroting Biden's claim that Russia started the current war in Ukraine, consider the truth about previous US lies:

Iraq War: There were no WMDs in Iraq

Spanish-American War: Spain didn't sink the Maine.

World War I: The Lusitania was illegally filled with weapons and ammo.

Vietnam War: The Gulf of Tonkin incident was faked.

Syrian War: There was no chemical attack in Syria.

World War II: FDR provoked the war by cutting off Japan's oil shipments and the Japanese delivered an official declaration of war hours before the supposed surprise attacks.

Mexican-American War: Mexicans did not kill Americans on US soil

Revolutionary War: Thomas Jefferson lied when he called Native Americans "savages."

US imperialism since 9/11 has killed at least 12 million people, 85%-90% were civilians.

US imperialism since the end of World War II (1945) has killed between 20 and 30 million people.

The number of American military killed in US wars since 1945 are 250,000.

The population of the **Soviet Union** in 1939 was 189 million. The estimated number of World War II deaths was 27 million, 7 million of whom were civilians, or about 14.3% of the population,

The population of the **United States** in 1939 was 139 million. The estimated number of World War II deaths was 292,000, 6,000 of which were civilians, or about 0.21% of the population.

I oppose all wars. I was a conscientious objector in the Vietnam War. I am not in any way supporting Putin or his wars. I am telling you that the big problem is US imperialism. The problem is the massive campaign donations the Democratic and Republican parties (both of them, not just one or the other) take from the military industrial complex.

If you oppose war, consider voting for Cornel West, Green Party. And please, please, go to the Green Prty website and sign up as a volunteer to help collect signatures in your state to make sure the Green Party is on the ballot in your state.

“End the wars. Bring our troops home and invest those trillions of war dollars into American communities. Support veterans, stop all foreign military aid, close the bases, disband NATO, and ban nuclear weapons globally.” —Cornel West

2002 (tweet from 15 January 2023): “This is a 2002 map of 719 united states military bases ‘outside’ the US. The total today is about 800. Why would a country, protected by two large oceans and benign states North & South require this number of military bases around the world?” —[Charlie Windsor](#).



war crimes

28 July 2023: “As we look to hold Russia accountable for invading Ukraine, let’s recall that US post 9/11 wars in Iraq, Afghanistan, Syria, Yemen & Pakistan caused at least 4.5 million deaths and displaced 38 to 60 million people, with 7.6 million children starving.” —[Medea benjamin](#)

See: War is a Racket

Raphael Warnock

24 August 2023: “Warnock’s financial disclosure shows he received \$154,895 in compensation from Atlanta’s historic Ebenezer Baptist Church in 2022, while outside income for senators is limited to around \$30,000.” —[Stephanie Voltolin](#)

Elizabeth Warren

“There is nobody in this country who got rich on their own. Nobody. You built a factory out there - good for you. But I want to be clear. You moved your goods to market on roads the rest of us paid for. You hired workers the rest of us paid to educate. You were safe in your factory because of police forces and fire forces that the rest of us paid for. You didn’t have to worry that marauding bands would come and seize everything at your factory... Now look. You built a factory and it turned into something terrific or a great idea - God bless! Keep a hunk of it. But part of the underlying social contract is you take a hunk of that and pay forward for the next kid who comes along.” —Elizabeth Warren

Booker T. Washington

“We all should rise, above the clouds of ignorance, narrowness, and selfishness.”
—*The Story of My Life and Work*, Booker T. Washington

“A lie doesn’t become truth, wrong doesn’t become right, and evil doesn’t become good, just because it’s accepted by a majority.” —Booker T. Washington

“Great men cultivate love and only little men cherish a spirit of hatred; assistance given to the weak makes the one who gives it strong; oppression of the unfortunate makes one weak.” —*Up from Slavery*, Booker T. Washington

wasicu

Wasicu means greedy person. “Literally, ‘those that eat the fat’ as in they take everything, just so others won’t have it, even if they don’t acutally need it or use it.”
—Hyapatia Lee

watchOS

operating system

Proprietary OS by Apple for Apple Watch.

water

As of May 2023:

Flint, Michigan, still doesn't have clean water.

East Palestine, Ohio, still doesn't have clean water.

Jackson, Mississippi, still doesn't have clean water.

SNAP can be used to pay for single use bottles of water and even gallon jugs of water, but can't be used to pay for the water bill.

31 August 2023: "This week, Biden's National Infrastructure Advisory Council recommended privatizing the country's water.

Privatizing this vital resource—that for-profit entities abuse whenever they can—is a terrible and dangerous idea.

Biden must reject this outright." —[More Perfect Union](#)

1 September 2023: "Joe Biden hired a Goldman Sachs executive as chairman to his National Infrastructure Advisory Council and they are calling for the privatization of water


Another example of how Democrats get away with evil in ways Republicans wish they could" —[Revolutionary Blackout Network](#)

water (element)

Water is one of the four Western elements (fire, earth, air, water).

Waterfalls

21 November 2023: “FUN FACT: Cee Lo sang background vocals on “Waterfalls” by TLC” —[André Mariette](#)

See: .wav  — file extension

John Wayne

This is so you can identify the source of this horrible quote:

“Our so-called stealing of this country from them was just a matter of survival. There were great numbers of people who needed new land, and the Indians were selfishly trying to keep it for themselves.” —John Wayne

See: .wbmp  — file extension

See: .wdp — file extension

Wear OS

operating system

Proprietary OS by Google

a version of Google’s Android operating system designed for smartwatches and other wearables. —[Wikipedia: List of operating systems](#)


WebAssembly

keyword: JavaScript object

web browser

web brau’-zər, *noun*

Application software for accessing the world wide web.

See: `.webm`  — file extension

See: `.webp` — file extension

Cornel West

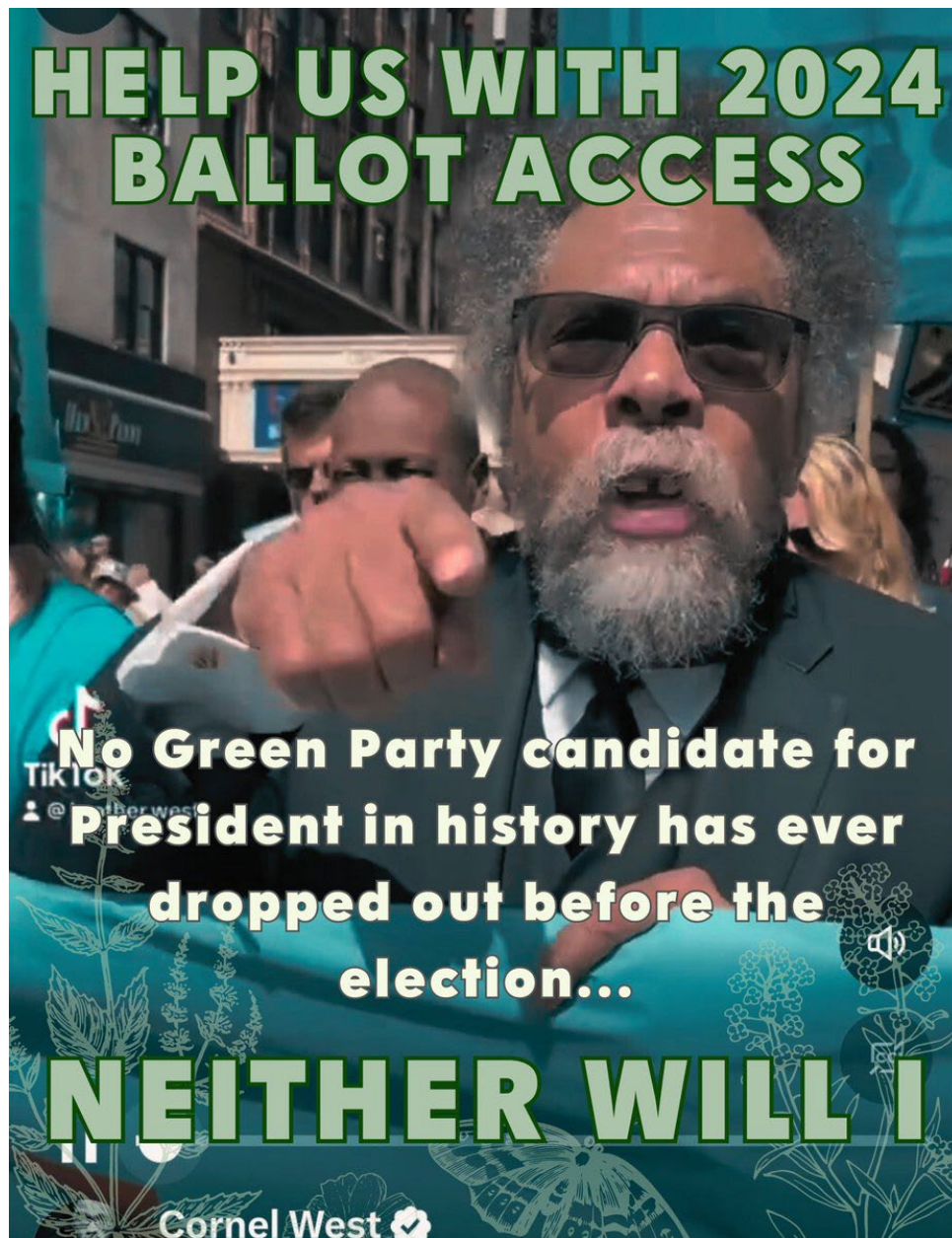
5 October 2023 Cornel West announced he would abandon his candidacy for the Green nomination and instead run as an independent.

Help the Green Party get on the ballot in your state: [Ballot Access Information](#).

Until December 2023, those in Delaware can register Green at [Delaware new voter registration](#) or change their existing registration to Green at [Delaware ballot requests](#).

“Harriet Tubman was a threat. Fanny Lou Hamer was a threat. MLK was a threat. SO what does it mean to be a threat? It means calling into question an orer that is preidcated on too much suffering of precious everyday people.” —Cornell West

“When somebody chooses to vote for you you’re not pulling votes away. You see, Biden doesn’t own any votes. He’s got to earn it.” —Cornell West



“Despite professing support for the right to have an abortion, the Democratic Party has failed to take the long-term legislative steps that would provide federal protection.” —Cornel West

10 July 2023: “Let us not be deceived: NATO is an expanding instrument of U.S. global power that provoked Russia into a criminal invasion and occupation of Ukraine. This proxy war between the American Empire and the Russian Federation could lead to World War III. We must stop the war and war crimes (including cluster bombs used by all parties) and embark on diplomatic talks that should lead to a just peace. As the great W. E. B. Du Bois wrote in 1945 “I seem to see outlined a third World War based on the suppression of Asia and the strangling of Russia.” The Democratic Party is a party of war and Wall Street targeting Russia and China. Let us save our democracy and world by dismantling U.S. militarism at home (as in Cop Cities) and abroad - as Martin Luther King Jr. painfully reminded us! #NATO #ClusterBombs ” —[Cornel](#)

West

“The country is in deep trouble. We’ve forgotten that a rich life consists fundamentally of serving others, trying to leave the world a little better than you found it. We need the courage to question the powers that be.” —Cornel West

“End the wars. Bring our troops home and invest those trillions of war dollars into American communities. Support veterans, stop all foreign military aid, close the bases, disband NATO, and ban nuclear weapons globally.” —Cornel West

7 July 2023: “Let us be clear: Cluster bombs are crimes against humanity! They disproportionately kill children and innocent people far long after they’re dropped. Shame on President Biden for such revolting barbarity and shameless hypocrisy! #ClusterBombsAreWarCrimes” —[Cornel West](#)

“I don’t wanna move into the White House until everybody has a house.” —Cornel West

18 July 2023: “For me, this ain’t about just no candidacy. I told my beloved wife, if I win the White House, I’m not moving into the White House until everyone has a house! That’s what it means to serve the people, love for the people, sacrifice for the people.” —video of Cornel West speaking [Political Life](#)

18 July 2023: “When I go around the country, I say I just want to re-introduce the country to the best of America... What does the world of American Empire look like on the chocolate side of town?” —video of Cornel West speaking [Political Life](#)

18 July 2023: “Look at what’s going on in Ukraine... All the TV shows generating this rightly sympathy for precious Ukrainians getting attacked... but do you notice they don’t say a word about Palestinians?... A Palestinian baby has the same value as a Ukrainian baby!...” —video of Cornel West speaking [Political Life](#)

18 July 2023: “For the last 40 or 50 years we’ve had too many Black leaders who have become too well-adjusted to injustice... That’s what it is to live in an American Empire that is in internal decay as it spends trillions on wars...” —video of Cornel West speaking [Political Life](#)

“There is a price to pay for speaking the truth. There is a bigger price for living a lie.” —Cornel West

“It takes tremendous discipline, takes tremendous courage, to think for yourself, to examine yourself.” —Cornel West

18 July 2023: “Imagine framing Dr. Cornel West, a preeminent black scholar and activist, as “the biggest threat to our survival” or pretending we’re a “free people” when we live under a plutocratic dictatorship of the bourgeoisie.” —[Robert D Skeels](#),

JD, Esq. Free

18 July 2023 CRITIC: “Third party candidates like RFKJr, Cornel West, possibly Joe Manchin, are the biggest threat to our survival as a free people who govern ourselves” —Laurence Tribe

Mussolini, the inventor of fascism, defined it as a merger of state and corporate power. On 7 February 1972, President Richard Nixon signed the Federal Election Campaign Act (FECA) of 1971 into law, legalizing corporate campaign donations. The Democratic, Libertarian, and Republican Parties take corporate campaign donations that greatly sway their policies, literal fascism. The Green Party refuses to accept any corporate campaign donations.

17 July 2023 CRITIC: “Third party candidates like RFKJr, Cornel West, possibly Joe Manchin, are the biggest threat to our survival as a free people who govern ourselves” —Michael Beschloss

“When ordinary people wake up, elites begin to tremble in their boots.” —Cornel West

12 July 2023: “After years of pushing identity politics, Dr Cornel West should be a dream candidate for all Democrats to get behind, even as an independent. But they will back their corrupt old white guy Joe Biden as they were never sincere about any of it.” —Polly Tickal

“The only countervailing force against organized money at the top is organized people at the bottom.” —Cornel West

“Look at the strikes going on right now. UPS escalating. Amazon. Hollywood SAGAFTRA strike. Both Democrats and Republicans are on the bosses side! How many have taken a stand with the workers being exploited?” —Cornel West

“You can’t lead the people if you don’t love the people. You can’t save the people if you don’t serve the people.” —Cornel West

18 July 2023, speaking to Anderson Cooper on CNN: “The Iraq Invasion was a crime against humanity. Mass incarceration is a crime against humanity. I’ve taught in prisons 41 years. They are sites of BARBARITY! I’m not trying to trash Brother Biden, but make him accountable for his actions and that’s for any politician.” —Cornel West

18 July 2023, speaking to Anderson Cooper on CNN: “I’m concerned with poor and working people. Trying to come to terms with The Cop Cities. the striking workers, ecocide, fossil fuels, and corporate greed.” —Cornel West

10 July 2023: “44% of registered voters polled said they would support a 3rd party

candidate if their choices are between Biden vs Trump again.

34% of eligible voters didn't vote in the 2020 election.

[That's] why team blue is having a meltdown over Dr. Cornel West.” —[Steve living in dystopian times](#)

26 July 2023: “The Democrats are in a bad spot. They are going to replace Biden - either at the convention or soon before. This will open up a huge lane for Cornel West and his 3rd Party run. I'll explain.” —[Professor Anthony Zenkus](#)

The replacement won't be Kamala. Her approval numbers are dismal and she's definitely not serious enough to be president. Newsom is a top contender- and is currently salivating on the sidelines. Whitmer is also a contender. A Newsom-Whitmer ticket might be attractive to them but if they sideline Kamala, a woman of color and the first woman VP, for an all-white ticket with a white man at the top, this will not play well. They cannot afford a subdued black voter turnout. Or lower numbers w/women. This is going to be a close election and they know it.

So it doesn't look good for them. If they foist a donor-approved pick on us around convention time, people won't be happy. Of course the loyalist base will be all-in lockstep, but that's not most Democrats. And it won't play well with independents.

The main problem with this is they can't do it too soon because Democrats definitely do NOT want vigorous primaries and debates on policy. At all. Esp on Ukraine. So it has to be post-primary time and before convention. Which means they will be choosing the nominee in a back room.

The Dem loyalists will fall in line, but it won't be enough. Most Dem voters don't even want Biden to run again. So the scenario will likely be: Biden is out as nominee, a woman of color has been passed over for the nomination, and many voters feel alienated.

The other option is they begrudgingly do it before primaries are over, which means they will have to agree to one or two debates tops. And just push Newsom or whoever as hard as they can. Remember they have the msm locked up so whoever they like will be given the royal treatment.

The only advantage to this approach is that Kamala would lose fair and square and they would hope the base won't feel slighted. But it's risky. The heat will have to be turned up on RFK Jr so his anti-Ukraine war position isn't taken seriously.

Expect some currently unknown scandal about him to break at that point. Again, they don't want fair primaries and open debates on policy, but they also don't want a depressed black voter turnout - which was a significant factor in Hillary's loss in key states in 2016.

So it's a mess. And what does this have to do with Cornel West? Everything. His entire candidacy is built on the critique that neither party serves us and neither party cares what we think. Any of these scenarios feeds into this.

He is also a strong, consistent activist author and speaker against racism. All he'd have to do is say “Look how they treated our dear sister Kamala” and the party would be in serious trouble. He doesn't support Kamala Harris on policy, but he'd be right to say it.

And it could likely resonate with enough voters to make the difference in what will be a close election. Despite the course Dems choose it will give enough voters enough pause to consider Cornel West as an option. Dems are terrified of this.

The bottom line is - there are no good options for them unless they throw in the towel for 2024 and focus on midterms and 2028. That's always an option. But if Trump is the nominee and he wins, they fear he won't go along with whatever war plans they have in place.

So it's a mess. They don't have great options. Mitch McConnell just had something resembling a mini-stroke on live TV - the age factor doesn't play well for Biden.

If Cornel West can hone his message and be more disciplined in major interviews, he can use this moment to gain serious momentum. He needs a strong campaign manager and messaging people who can boil his message down to a simple message that will resonate:

"These parties don't care about you and aren't serving you. We need to move forward outside the two-party system and now is the time".

The final option is they do what they can to push Biden across the finish line, pray he wins, then convince him to step down after the election. That would mean a 4 year Kamala presidency and it is quite the gamble. Again, they don't have good options here.

And Biden is in serious decline. There's serious risk he won't be able to continue till November 2024. As @peterdaou points out, top Democrats are saying Biden is much more frail in person than he appears on camera. There's a reason he skips state dinners when he travels.

So... if there was ever an opening for a true working-class aligned 3rd Party candidate, now is the time. Cornel West needs to see his candidacy as not symbolic. He needs to be in it to win. That means choosing a team of serious outsiders who are on the same page.

All this talk of political machinations makes me sick. I hate the horse race. I and many Americans know we have been abandoned by this system and the two parties which prop it up. But I have hope.

I believe the people are waking up. I believe the corrupt system cannot last. I feel it deep inside. History never changes overnight, so whatever happens with Dr. West's candidacy, it will be a major role in moving us toward a people-centered, worker-centered society where we put people over profits, care for our planet and ensure a future where all people, here in the US and globally, can flourish. We have to because any other option is untenable.

[Biden's] approvals hover between 39 and 41%. Most voters don't want him to run, including most Dems. His health- cognitive and physical- is in serious decline. Dem insiders are saying off the record that he is in bad shape. He can't campaign.

The point is Democrats use marginalized groups to get elected and then toss them aside when they're no longer of use. It's the virtue-signaling of identity politics. Maybe he wouldn't say it, but people would and it would be true." —Professor Anthony Zenkus

Cornel West received his B.A. from Harvard and PhD from Princeton and the legacy media is trying to convince you that he is a “left-wing celebrity philosopher.” He was a profesor at Harvard, the Union Theological Seminary in the City of New York, Yale Divinity School, Princeton, and Harvard Divinity School, among others.

23 July 2023: “#CornelWest2024 isn't a PROTEST vote.
#CornelWest2024 is a SURVIVAL vote.” —[Stephanie Voltolin](#)

13 August 2023: “Dr. West brings civility, decency, and respect into politics — qualities sadly lacking in today’s political culture. His candidacy can help raise the level of political discourse in this country.” —[Robert F. Kennedy Jr](#)

13 August 2023: “Cornell West is a truth-teller. I’m glad he’s part of the presidential race because he is a thoughtful, brave, compassionate, and honest person who sees how devastating America’s forever wars have been to this country and the world, and who understands how corrupt corporate influence has hijacked our government and both political parties — especially the Democratic Party elites.” —[Robert F. Kennedy Jr](#)

21 August 2023: “Cornel West is morally and intellectually superior to literally every single government official in Washington and it’s not even remotely close.” —[Caitlin Johnstone](#)

21 August 2023: “For the past 50 years, I have been facing heavy financial responsibilities to family and friends. I have always made my priceless children a high priority - even with lavish treatments that are not in the records. The wave of IRS audits, fees, liabilities, levees, and liens have always been and are now resolved based on agreements set in place years ago. I do believe that we all should pay our fair share of taxes,Êspecially the top 1%! Like the 63% of my hard-working fellow citizens, I live paycheck to paycheck with dignity and determination! #PeopleOverProfits” —[Cornel West](#)

22 August 2023: “Biden & the Democrats haven’t done a damn thing to make things better and in many ways things are worse with the cost of living skyrocketing out of control so of course they are attacking Cornel West. They are terrified of voters finally leaving their corrupt party behind. Do it!” —[Ryan Knight](#)

22 August 2023: “Cornel West could have become a millionaire.
Instead, he owes taxes because he chose a life of service instead of one of self-enrichment and ego.

That is exactly who we should vote for.

The comments from the privileged are disgusting.

People owe taxes over emergencies and unexpected circumstances.

He didn’t just not pay them.

They’re so privileged that they don’t understand that people are broke from

Capitalism.

I had to go on an IRS payment plan in 2001 after getting laid off from my job.

I didn't make enough money to have a savings big enough and what I did have went to food.

Unlike Joe Biden, Cornel West writes his own tweets...

And baseless attacks are all they have while they simp for a racist warmongering sex pest.” —[Stephanie Voltolin](#)

23 August 2023: “Dr West @CornelWest ...“it’s not about this particular election only, it’s about a larger movement, we gotta break the 2-party system, and to do it is NOW...” ” —[ComptonMadeMe](#)

23 August 2023: “Cornel West on Meet the Press Now after he’s asked if he will drop out:

“I intend to be in this race until the end. It’s not just about this election. It’s about a larger movement to break the two-party system because it doesn’t meet the pressing needs of poor & working people.” ” —[Ryan Knight](#)

23 August 2023: “BREAKING: Cornel West speaks out on Meet the Press and did not back down.

“It’s hard to view oneself as a spoiler when there’s increasing rot in the system with two parties that are connected to big money, Wall Street, Silicon Valley & militarism abroad.” ” —[Ryan Knight](#)

24 August 2023“When it comes to the taxes, that’s definitely true. I’ve had waves of audits, waves of levies, waves of liens, and then the liabilities and the fees build up so you get in the black hole.” —Cornell West

29 August 2023“Wanna vote for #CornelWest in #Massachusetts?

Register GREEN-RAINBOW

At least 1% of all state voters registering GREEN-RAINBOW will allow the Party to nominate their candidates to the ballot.

Register here: <https://sec.state.ma.us/OVR/>” —[Green Party Ballot Access](#)



29 August 2023: “Democrats are not committed to democracy internally in how they run their primaries or externally in how they deal with third parties. They are not committed to democracy at home in how they hide the oligarchy or abroad with their imperialism.” —Cornel West

29 August 2023: “It’s not speculation to say today’s liberals would despise Martin Luther King Jr, it’s a presently observable reality — just look how they shit on Cornel West. The millisecond a black activist leader becomes politically inconvenient, they’re shrieking for his head like hyenas.” —[Caitlin Johnstone](#)

29 September 2023: “Cornel West is moving beyond the DSA and forging bonds with activists who call for the revolutionary overthrow of capitalism.” —Mother Jones

Floyd Westerman

“In 1823, the Supreme Court said that the Indian nations do not have title to their lands because they weren’t Christians. That the first Christian nations to discover an area of heathen lands has the absolute title. This doctrine should be withdrawn and renounced to establish a new basis for the relationship between indigenous peoples and other peoples of the world.” —Floyd Westerman, Lakota

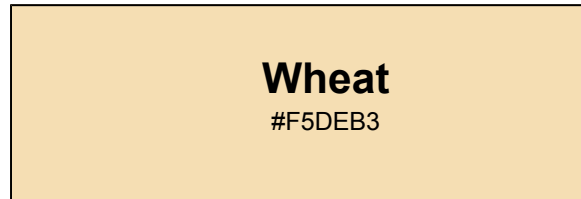
wetlands

29 August 2023: “The EPA removes federal protections for most of the country’s

wetlands” —[Holding Biden Accountable](#)

Wheat

keyword: HTML color name



wheel

The oldest known wheel is a wooden wheel found in 2002 approximately 12 miles south of Ljubljana, the capital of Slovenia. It is now in the city's museum. Radiocarbon dating puts it between 5,100 and 5,350 years old (as of 2002).

when

keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: Ruby reserved word

keyword: SQL reserved word (z/OS)

keyword: VHDL reserved key word

when-compiled

keyword: COBOL reserved word (z/OS)

whenever

keyword: SQL reserved word (ANSI, Oracle)

where

keyword: SQL reserved word (ANSI, Oracle, z/OS)

while

keyword: Ada reserved key word

keyword: C keyword

keyword: Java reserved key word

keyword: JavaScript reserved word

keyword: Objective-C reserved word

keyword: PHP reserved word

keyword: Ruby reserved word

keyword: VHDL reserved key word

whiskey

The word whisky comes from the Gaelic phrase *ulsege beatha* which means water of life.

White

keyword: HTML color name

White

#FFFFFF

White House

26 July 2023: “The worst thing about US election season is that many people who know better become convinced by a political circus that getting “the right guy” in the White House will magically fix everything. This political savior mentality is religion, not reality.” —[Whitney Webb](#)

Jack White

“Technology is a big destroyer of emotion and truth. Auto-tuning doesn’t do anything for creativity. Yeah, it makes it easier and you can get home sooner; but it doesn’t make you a more creative person. That’s the disease we have to fight in any creative field: ease of use.” —Jack White

WhiteSmoke

keyword: HTML color name

WhiteSmoke

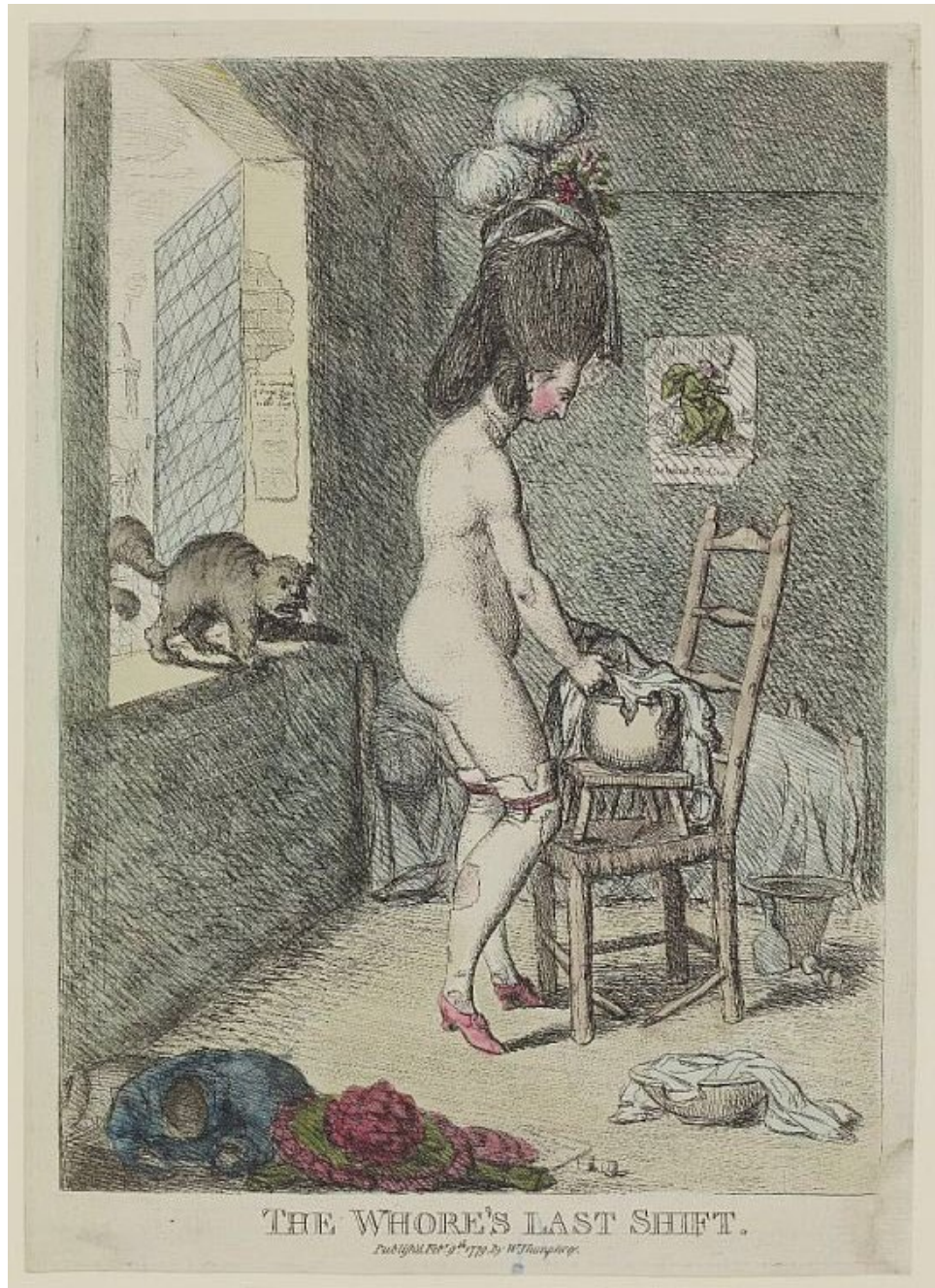
#F5F5F5

white supremacy

28 December 2023: “When Dems say “Trump will kill/lock up more people” take that as a threat, because that’s what it is. They’re basically telling you if you don’t fall back in line, we will use and hope white supremacy silences you. If you’re hurting now, wait until you see what we really can do.” —[Rome Bethea](#)

whore

While the primary modern meaning of the word whore is a prostitute or a sexually promiscuous woman, traditionally it also meant any woman who threatened the status quo and especially the power of the government and the church.



Willow project

President Joe Biden approved the Willow project on 13 March 2023.

The Willow project is an oil drilling project by ConocoPhillips located on the plain of the North Slope of Alaska in the National Petroleum Reserve in Alaska. The project was originally to construct and operate up to five drill pads for a total of 250 oil wells. Associated infrastructure includes access and infield roads, airstrips, pipelines, a gravel mine and a temporary island to facilitate module delivery via sealift barges on permafrost and between waters managed by the state of Alaska.

Environmentalist organization Earthjustice filed a lawsuit on 14 March 2023, on behalf of conservation groups to stop the Willow project, saying that the approval of a new carbon pollution source contradicts President Joe Biden's promises to slash greenhouse gas emissions in half by 2030 and transition the United States to clean energy.

The project could produce up to 600 million barrels of oil and 287 million tons of carbon emissions plus other greenhouse gases over 30 years, and could adversely impact Arctic wildlife and Native American communities. The Willow project would damage the complex local tundra ecosystem and, according to an older government estimate, release the same amount of greenhouse gases annually as half a million homes.

9 November 2023: "BREAKING: A federal court in Alaska has issued a ruling allowing the massive Willow oil project to proceed in Alaska's Western Arctic Reserve. We aren't giving up the fight: Our climate can't afford it. Our clients are considering an appeal as we keep working to stop Willow."

"While today's ruling is disappointing, we are entirely confident in our claims, and plan to appeal to the higher court," said Erik Grafe, Deputy Managing Attorney in Earthjustice's Alaska regional office." — [Earthjustice](#)

Woodrow Wilson

As we know from the Wilson administration, where the president was incapacitated for more than a year, the government can function without any interaction from the president.

His only job is as a figurehead to mouth the pronouncements of the billionaires.

See: `.wimp`  — file extension

window

keyword: JavaScript windows object

with


keyword: Ada reserved key word

keyword: COBOL reserved word (z/OS)

keyword: JavaScript reserved word

keyword: SQL reserved word (ANSI, Oracle)

keyword: VHDL reserved key word


See: [.wma](#)  — file extension

.wmf

file extension:

Vector graphics: Windows Metafile Format



See: [.wmv](#)  — file extension

woke

28 August 2023: “The term “woke” was created as a watchword for Black folks in the south to remain vigilant while traveling to avoid white supremacist violence.”

—[Nina Turner](#)

words

keyword: COBOL reserved word (z/OS)

workflow

28 September 2023: “workflow cheat sheet” — [Solar Heavy](#)



8 December 2023: “Pro workflow tip

Always create markers when mixing a song

Not only it helps to navigate a session, it mostly helps me to easily create automations for different parts of the song

Wherever I am in the session, I always see the timeline, and I can easily create automations” — [Nathaniel W.](#)



18 December 2023: “Pro workflow tip

If you use multiple sources of monitoring

Headphones, monitors, plugins with correction

Always consider that you need some time to adapt to the new sound.

You can’t switch and immediately think that you hear the right picture.

It happens because our brains tends to adapt to frequency response and tries to smooth it out

If you quickly switch between different frequency responses, your brain will apply “the EQ” from previous monitoring to the current one, distorting it even further from being balanced.

When I need to switch monitoring I love to give my ears a short break. Go drink some tea or coffee, open X, just restart my ears.

Then I start listening, and firstly it can sound a bit different from what it should be. Might need a few minutes to adapt to new frequency response, you also can play references in that moment.

Then I continue the job.” —[Nathaniel W.](#)

work requirements

On Wednesday, 17 My 2023, U.S. President Joe Biden confirmed his continued support for the imposition of harsh work requirements before the receipt of help for the poor and disabled.

“The WH statement on Biden’s work requirements comments seems to confirm expanded TANF work requirements are very much on the table.” —[Meredith Lee Hill](#)

“Also leaves the door open to concessiojns on expanded SNAP [food stamps] work requirements - though WH has described restricting SNAP as pushing people into poverty.” —[Meredith Lee Hill](#)

“The work requirements on cash assistance that the President voted for in ther 1990s are still the law today. As the President said, Medicaid is a different story, and the President has been clear that he will not accept proposals that take away peoples’ health coverage [Biden had a long history in the U.S. Senate of attempting to cut Medicaid and Social Security and as Presidnet has been actively privatizing Medicaid] The President has always been clear that he will not accept policies that push

Americans into poverty [despite having repeatedly done that as President]. He will evaluate whatever proposals Republicans bring to the table based on those principles.” —Michael Kikukawa, White House Assistant Press Secretary.

See: Temporary Assistance for Needy Families (TANF)

working-storage

keyword: COBOL reserved word (z/OS)

world web web

world wide web, *noun*

An interconnected information system of public webpage accessible through hyperlinks. Invented in 198 by Tim Berners-Lee working at CERN.

See: .wpl — file extension

write

keyword: COBOL reserved word (z/OS)

write-only

keyword: COBOL reserved word (z/OS)

writing pen knife

noun “A device that appears to be a writing pen, but has concealed a pointed, metallic shaft used as a stabbing instrument (Penal Code Section 17350)” [from Basic

Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7,
California Commission on Peace Officer Standards and Training]

WSFN

programming language

year created: 1983

“

WSFN - Which Stands For Nothing. Atari 1983. Beginner's language with emphasis on graphics, for Atari home computers. Version: Advanced WSFN.

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

WSL

programming language

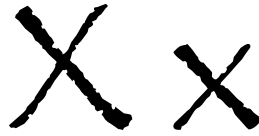
“

WSL - Waterloo Systems Language. A C-like systems programming language. “Waterloo Systems Language: Tutorial and Language Reference”, F.D. Boswell, WATFAC Publications Ltd, Waterloo, Canada. ISBN 0-919884-00-8.

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

Mark Twain

“It's easier to fool people than to convince them that they have been fooled.” —
Mark Twain



X

ASCII: 58 hex

UNICODE: LATIN CAPITAL LETTER X

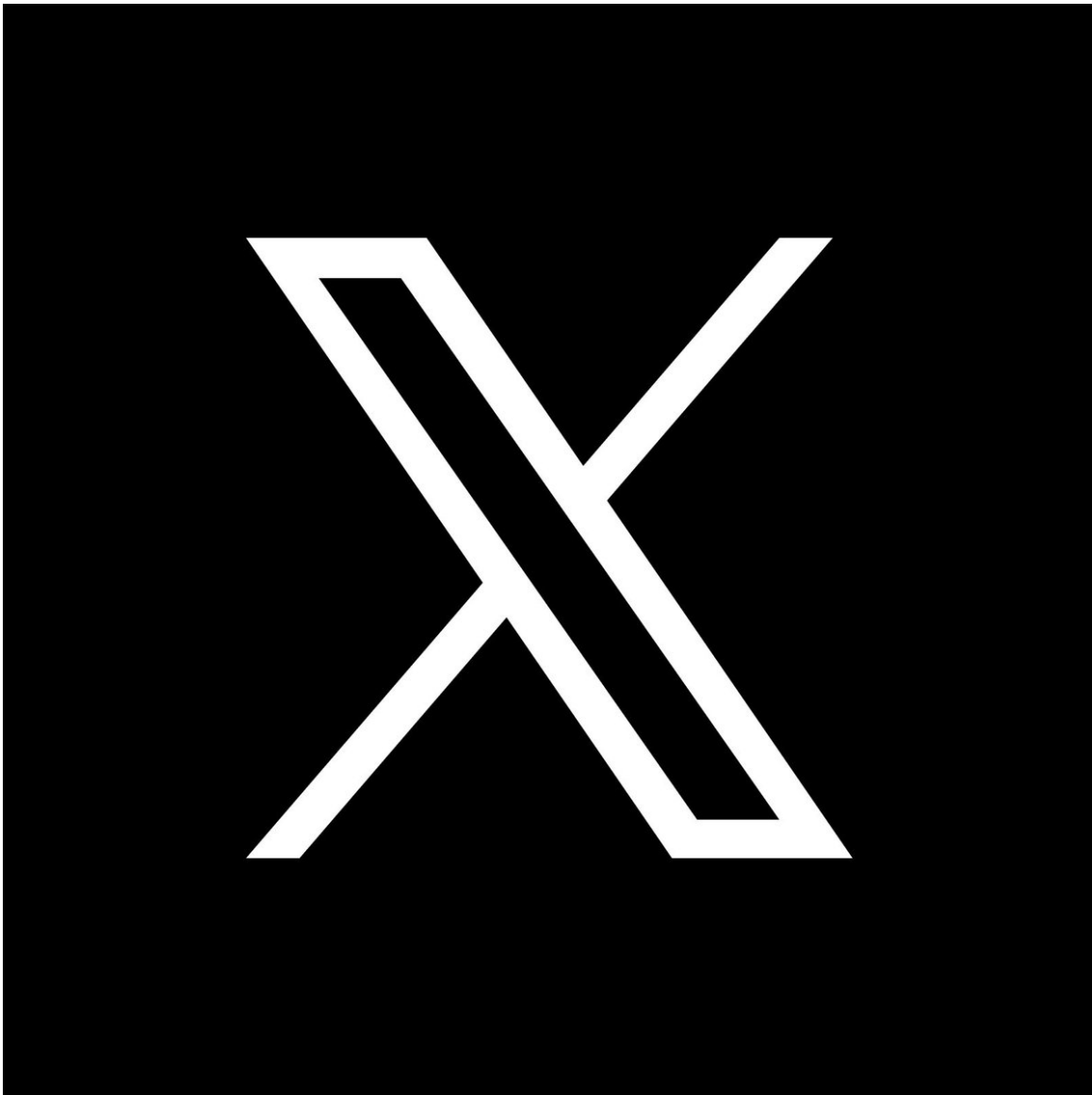
x

ASCII: 78 hex

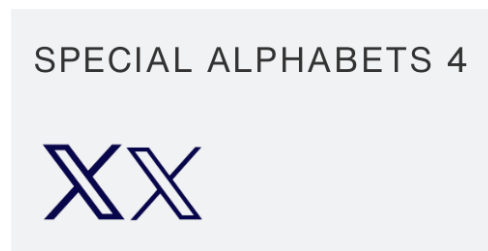
UNICODE: LATIN SMALL LETTER X

X

28 July 2023: “It looks like I have an app to a strip club for capitalists on my phone now. You can afford to hire a graphic designer, Elon.” —[Stephanie Voltolin](#)



24 July 2023: “Meta owns the trademark for X as a social network
Microsoft owns the trademark for X in finance and e-commerce
The X logo is a font that for \$30. Terms of use prevent use of single character from
that font as a logo
X stock ticker is Xerox
X for games is trademarked by Xbox” —[David Snelling](#)



Monotype's Special Alphabets 4 -- upper case X followed by lower case x

X-1

programming language

‘

X-1 - Early system on UNIVAC I or II. Listed in CACM 2(5):16 (May 1959).

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

xanthum gum

Xanthum gum is a chain of sugars fermented in the bacteria it is named for (*Xanthomonas campestris*).

It's a thickening agent, emulsifier, and stabilizer.

Basically, it holds the ingredients together, especially thing that don't normally stay together, like oil and water.

Xbase

programming language

‘

Xbase - Generic term for the dBASE family of languages. Coined in response to threatened litigation over use of the trademark “dBASE.”

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XBASIC

programming language

year created: 1972

“

XBASIC - eXtended BASIC. 1972. An extension of BASIC, including matrix operations and Algol-like procedures. For the Univac 1108.

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XC

programming language

year created: 1987

“

XC - Declarative extension of C++. “XC - A Language for Embedded Rule Based Systems”, E. Nuutila et al, SIGPLAN Notices 22(9):23-32 (Sep 1987).

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XDL

programming language

“

XDL - An object-oriented extension to CCITT's SDL[2]. “XDL: An Object- Oriented Extension to SDL”, S.J. Ochuodho et al in [?]

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Xfun

programming language

year created: 1991

‘

Xfun - S. Dalmás <dalmás@sophia.inria.fr>, INRIA, 1991. A cross between SML and Russell, intended for computer algebra. “A Polymorphic Functional language Applied to Symbolic Computation”, S. Dalmás, Proc Intl Symp Symb Alg Comp, Berkeley 1992.

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Xi

programming language

year created: 1982

‘

Xi - VLSI design language. “The Circuit Design Language Xi”, S.I. Feldman, unpublished memo, Bell Labs, 1982. Mentioned in Computational Aspects of VLSI, J.D. Ullman, CS Press 1984.

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XICS

programming language

‘

XICS - Xerox. Page description language.

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XL

programming language

year created: 1977

‘

XL - A tuple language used as the intermediate form in the code generator generator XGEN. “A Knowledge Based Code Generator Generator”, Proc Symp AI and Prog Lang, Aug 1977, pp.126-129.

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XLISP

programming language

‘

XLISP - eXperimental LISP. David Betz <dbetz@apple.com>. LISP variant with object-oriented extensions, portable source in C. BYTE article. Version 2.0. Version 2.1 by Tom Almy <toma@sail.labs.tek.com> is closer to Common Lisp.

`ftp://cs.orst.edu/pub/xlisp/*`

`//glia.biostr.washington.edu/pub/xlisp/xlisp21e.tar.Z`

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XLISP-PLUS

programming language

“

XLISP-PLUS - An extension of XLISP used in the WINTERP OSF/Motif Widget interpreter.

<http://www.eit.com/software/winterp/winterp/html>


ftp://ftp.x.org/contrib/devel_tools/winterp*

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

See: .xls — file extension

See: .xlsx — file extension

See: .xml — file extension

See: .xmp  — file extension

XNF

programming language

“

XNF - Hardware description language?

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

xnor

keyword: VHDL reserved key word

xor

keyword: Ada reserved key word

keyword: PHP reserved word

keyword: VHDL reserved key word

xor_bits

keyword: SQL reserved word (z/OS)

XPC

programming language

year created: 1989

‘

XPC - eXplicitly Parallel C. Dialect of Parallel C which is mode independent, i.e. efficiently compilable to both SIMD and MIMD architectures. "Toward Semantic Self-Consistency in Explicitly Parallel Languages," M.J. Phillip & H.G. Dietz, Proc 4th Intl Conf on Supercomputing, Santa Clara, CA, May 1989, v.1, pp.398-407. Research implementations only.

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

XPL

programming language

year created: 1967-1969

‘

XPL - Stanford, 1967-69. Small dialect of PL/I used for compiler writing. One-dimensional arrays. I/O achieved with character pseudo-variable INPUT and OUTPUT, e.g. OUTPUT = 'This is a line'; Inline machine code. “Programmers are given all the rope they ask for. Novices tend to hang themselves fairly frequently.” Implemented on IBM 360, Univac 1100, ICL System 4, CDC6000 and Cyber series, XDS Sigma-5 and Sigma-7, and DEC PDP- 10. “A Compiler Generator,” W.M. McKeeman et al, P-H 1970. Also JCC, AFIPS 1968.

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XPOP

programming language

year created: 1964

‘

XPOP - Extensible macro assembly language with user-redefinable grammar, for use with FAP. “XPOP: A Meta-language Without Metaphysics”, M.I. Halpern, Proc FJCC 25:57-68, AFIPS (Fall 1964).

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

XScheme

programming language

XScheme - David Betz. Scheme with object-oriented extensions. Source in C. Versions for PC, Macintosh, Atari, Amiga.
<ftp://labrea.stanford.edu/pub/xscheme.tar.gz>
comp.sources.amiga/volume90, version 0.28 for Amiga

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

XSP

abbreviation

operating system

Proprietary OS by Fujitsu

XTRAN

programming language

XTRAN - FORTRAN-like, interactive. [?]

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

XTS-400

abbreviation

operating system

Proprietary OS by BAE Systems.



Y

ASCII: 59 hex

UNICODE: LATIN CAPITAL LETTER Y

y

ASCII: 79 hex

UNICODE: LATIN SMALL LETTER Y

Y

programming language

year created: 1981

‘

Y - General purpose language syntactically like RATFOR, semantically like C. Lacks structures and pointers. Used as a source language for the Davidson/Fraser peephole optimizer. “The Y Programming Language”, D.R. Hanson, SIGPLAN Notices 16(2):59-68 (Feb 1981).
<ftp://ftp.cs.princeton.edu/pub/y+po.tar.Z>

—*The Language List*: information from *The Language List*, started 7 March 1991
 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

Yaa

abbreviation

programming language

“

Yaa - Yet Another Assembler - Macro assembler for GCOS 8 and Mark III on Bull DPS-8 machines. Available from Bull as part of U Waterloo Tools package (maintained by <pjf@thinkage.on.ca>).

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

yacc

abbreviation

programming language

year created: 1975

“

yacc - Yet Another Compiler Compiler. Language used by the Yacc LALR parser generator. "YACC - Yet Another Compiler Compiler", S.C. Johnson, CS TR 32, Bell Labs (Jul 1975).

Implementations:

ayacc - UC Irvine. written in **Ada**, produces **Ada** output

ftp://liege.ics.uci.edu/pub/irus/aflex-ayacc_1.2a.tar.Z

Bison - from GNU ftp://prep.ai.mit.edu/pub/gnu/bison-1.21.tar.Z

Bison++ - produces C++ output.

ftp://psuvax1.cs.psu.edu/pub/src/gnu/bison++-1.04.tar.Z

perl-byacc - produces perl output ftp://ftp.sterling.com/local/perl-byacc1.8.2.tar.Z

SASL-yacc - "Yacc in SASL - An Exercise in Functional Programming", Simon Peyton-Jones, Software Prac & Exp 15:807-820 (1985). Mentions also a BCPL implementation.

yacc++ - 1990. An object-oriented rewrite of yacc, supports regular expressions, produces an LR(1) parser. "YACC Meets C++", S.C. Johnson, USENIX Spring '88 Conf. Chris Clark, Compiler Resources Inc, Barbara Zino

<bz%compres.UUCP@primerd.cv.com> (508) 435-5016.

MLYACC - Implementation and output in SML/NJ
ftp://research.att.com/dist/ml/75.tools.tar.Z

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

yacc++

abbreviation

programming language

year created: 1990

“

yacc++ - 1990. An object-oriented rewrite of yacc, supports regular expressions, produces an LR(1) parser. "YACC Meets C++", S.C. Johnson, USENIX Spring '88 Conf. Chris Clark, Compiler Resources Inc, Barbara Zino <bz%compres.UUCP@primerd.cv.com> (508) 435-5016.

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

yacc

YALLL

abbreviation

programming language

year created: 1979

“

YALLL - Yet Another Low Level Language. Patterson et al, UC Berkeley, 1979. A microprogramming language resembling conventional assembly

language. "Towards an Efficient Machine-Independent Language or Microprogramming", D.A. Patterson et al, Proc 12th Ann Workshop Microprogramming (MICRO-12), 1979, pp.22-35

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

See: yang foods

YAPS

abbreviation

programming language

“

YAPS - Yet Another Production System? College Park Software.
Commercial production rule language, simpler than OPS5. Allows knowledge
bases to be attached to instances of CLOS objects.
info: Liz Allen <liz@grian.cps.altadena.cs.us>

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

YASOS

abbreviation

programming language

“

YASOS - Yet Another Scheme Object System.
info: Ken Dickey <kend@newton.apple.com>

—***The Language List:** information from *The Language List*, started 7 March 1991*

by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

Yay

abbreviation

programming language

‘

Yay - Yet Another Yacc - An extension of Yacc with LALR(2) parsing. Available from Bull as part of U Waterloo Tools package (maintained by <pjf@thinkage.on.ca>).

—***The Language List:** information from *The Language List*, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

year

“A year is the orbital period of a planetary body, for example, the Earth, moving in its orbit around the Sun. Due to the Earth’s axial tilt, the course of a year sees the passing of the seasons, marked by change in weather, the hours of daylight, and, consequently, vegetation and soil fertility. In temperate and subpolar regions around the planet, four seasons are generally recognized: spring, summer, autumn and winter. In tropical and subtropical regions, several geographical sectors do not present defined seasons; but in the seasonal tropics, the annual wet and dry seasons are recognized and tracked.” —[Wikipedia](#)

year

keyword: SQL reserved word (z/OS)

Yellow

programming language

year created: 1978

‘

Yellow - SRI. A language proposed to meet the Ironman requirements which led to **Ada**. "On the YELLOW Language Submitted to the DoD", E.W. Dijkstra, SIGPLAN Notices 13(10):22-26 (Oct 1978).

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Yellow

keyword: HTML color name



yellow dock

Yellow dock (*Rumex crispus*) is a common weed found in Serbia, Korea, and China. The leaf stalks are used in salads. The root and fruits are used as medicine.

—[WebMD](#)

Yellow dock contains chemicals that work as laxatives and have anti-inflammatory effects. It also contains chemicals that might kill parasites, bacteria, and fungi.

—[WebMD](#)

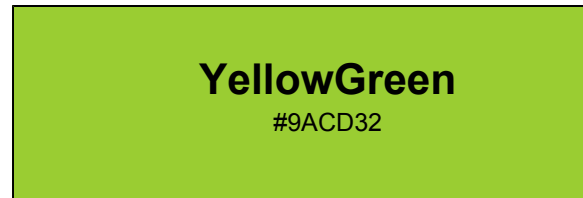
People use yellow dock for pain, swelling of the nasal passages and the respiratory tract, constipation, hemorrhoids, and many other conditions, but there is no good scientific evidence to support these uses. —[WebMD](#)

Don't confuse yellow dock with sorrel or wood sorrel. These are not the same.

—[WebMD](#)

YellowGreen

keyword: HTML color name



Yemen

16 December 2023: “BREAKING

Israeli defense minister:

“We are ready to act against the Houthis, but we are giving the world a chance first”

The Houthis announced today that they will move on to the next phase of “sinking every ship heading to Israel” if the genocide in Gaza is not stopped.” —[Megatron](#)

31 December 2023: “Multiple Reports that the US and UK are preparing to declare total war on the Houthis and Yemen

An Joint-Statement is reportedly expected to be made in the coming hours by the US, Britain and probably Germany, announcing that they are in Final Preparations for a Large-Scale Military Operation against the Houthis in Yemen.

The attack will include the launch of Hundreds of Missiles and Airstrikes against Pre-Planned Targets in Western Yemen and the Red Sea.

Senior Houthi officials are in Tehran at the moment.” —[Megatron](#)

11 January 2024: “That the US backs Israel is discussed all the time obviously but Israel is not reduced entirely to this pawn-like relationship inferred in the spooky “Iran backed” pejorative, for example the New York Times has never used the term “US-backed Israel”

[cited tweet was a follow-up to:] It’s always “Iran-backed Houthis” but never “US-backed Israel” because it’s important to maintain the vague impression the US is a neutral human rights organization that just happens to sell 2000 lbs bombs” —[Adam Johnson](#)

11 January 2024: “Biden on Strikes Against Yemen’s Houthis tonight:

“These strikes are in direct response to unprecedented Houthi attacks against international maritime vessels in the Red Sea—including the use of anti-ship ballistic missiles for the first time in history.

These attacks have endangered U.S. personnel, civilian mariners, and our partners,

jeopardized trade, and threatened freedom of navigation.

More than 50 nations have been affected in 27 attacks on international commercial shipping.

Crews from more than 20 countries have been threatened or taken hostage in acts of piracy.

I will not hesitate to direct further measures to protect our people and the free flow of international commerce as necessary.” —[Megatron](#)

Note that Biden is surrounded by the flags of the two nations that he is conducting the bombing of one of the poorest nations on behalf of.



12 January 2024: “In 2010, Israel illegally intercepted 6 ships in international waters that were bringing humanitarian aid to Gaza. They boarded 3 ships and shot and killed 9 civilians.

Houthis try to blockade Israel for committing an actual genocide, no one is killed, and we bomb Yemen.” —[Prof Anthony Zenkus](#)

12 January 2024: “Biden just starts fucking bombing people and doesn’t even address the nation. Just goes around eating ice cream and shit. I fucking hate it here.” —[Jason Overstreet](#)

13 January 2024: “Biden to Iran:
“The US is preparing for war with Yemen”

Reuters wrote today that the President of the United States sent a special message to Iran about the attacks of the Houthis and assured Iran that the United States is fully prepared for war with Yemen.

Today, the US carried out airstrikes on Yemen and the airport in Sana’a for the 3rd time. Damage was minimal because the Houthis had already evacuated and hidden all military equipment and army. And yesterday they again attacked ships connected to

Israel without a problem.

Biden quickly learned the lesson that an airstrike against Yemen accomplishes absolutely nothing, it is total nonsense, and all it has accomplished is to completely close the Suez Canal to commercial shipping.

British Defense Minister also sent an empty threats to Iran: Our patience is running out.

The *Telegraph* wrote that British aircraft carriers would not join the war because of a “crisis among military personnel”, probably because the British did not want to go to war in the name of genocidal Israel.

The Houthi forces today released videos of large-scale exercises that prepared them for a war against the United States and Israel.

Major General Mohammad Nasser al-Atafi announced:

“Yemen is ready to deter and respond, and we have the advantage in the Red Sea and Gulf of Aden. As long as the war against our brothers in Gaza continues, we will have many surprises.”

British Independent wrote that all Gulf countries allowed Britain and America to use their airspace to attack Yemen, except the Sultanate of Oman.

This means that Qatar, the UAE and Saudi Arabia are officially joining the US coalition in the war with Yemen. Aramco will probably be targeted, and US and UK due to the jump in the price of oil, will bring Europe even more into a big financial crisis.” —[Megatron](#)

15 January 2024: “What did the US and UK achieve by attacking Yemen?

They created the new Nord Stream blow-up situation and made a new economic blow for #Europe.

In an attempt to protect #Israel while it carries out its genocide, they turned the #RedSea into a war zone, stopped all shipping here, created huge economic losses for Europe, whose ships had been passing through without a problem until now.

As a reminder, the #Houthis #Yemen did not allow ships to sail only to Israel, until the genocide in #Gaza was stopped. The #US refused that and attacked the Houthis. Europe turned out to be the stupid donkey that everyone rides.

And not only that, #Biden also managed to show how weakened the United States is now and how it is no longer able to handle even a far less armed army.” —[War reports](#)

18 January 2024: President Joe Biden was asked “Are the air strikes in Yemen working?”

“Well, when you say ‘working’, are they stopping the Houthis, ‘no’, are they going to continue, ‘yes’.” —Joe Biden in video tweeted by [Ryan grim](#); includes video

Biden wasn’t lying. On Thursday, the U.S. led another round of airstrikes in Yemen. “U.S. Central Command forces conducted strikes on two Houthi anti-ship missiles that were aimed into the Southern red Sea and were prepared to launch,” CENTCOM posted on X.

Doubling down on things that haven’t worked, the Biden administration also

announced new sanctions on the Houthis, the de facto government in Yemen, along with a new “specially designated global terrorist” label, which makes it difficult for the Houthis to engage in global transactions.

Yerk

programming language

“

Yerk - (named for Yerkes Observatory) A public domain reincarnation of Neon.

ftp://oddjob.uchicago.edu/pub/Yerk

info: Bob Lowenstein <rfl@oddjob.uchicago.edu>

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

YES

keyword: Objective-C word

yield

keyword: JavaScript reserved word

keyword: PHP reserved word

keyword: Ruby reserved word

See: yin foods

YLISP

abbreviation

programming language

‘

YLISP - Hewlett-Packard. A variant of Xlisp for the HP-95LX palmtop.
ftp://hpcsos.col.hp.com/mirrors/.scsi5/hp95lx/languages/ylisp*

—*The Language List: information from The Language List, started 7 March 1991*
 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

See: yoga

youth centers

noun “Any public or private facility used to host recreational or social activities for minors while minors are present” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Yugoslavia

nation

The United States and the North Atlantic Treaty Organization (NATO) bombs Yugoslavia and causes its disintegration 1999.

Zz

Z

ASCII: 5A hex

UNICODE: LATIN CAPITAL LETTER Z

z

ASCII: 7A hex

UNICODE: LATIN SMALL LETTER Z

See: **.z** — file extension

Z

programming language

year created: 1980

“

1. ("zed") Programming Research Group, Oxford U, ca 1980. A specification language based on axiomatic set theory and first order predicate logic. Uses many non-ASCII symbols. Used in the IBM CICS project? "Understanding Z", J.M. Spivey, Cambridge U Press 1988. An embedding of Z in HOL available from ICL <ProofPower-server@win.icl.co.uk>

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Z

programming language

2. A stack-based, complex arithmetic simulation language. ZOLA Technologies, ZOLA@Applelink.Apple.com.

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

Z++

programming language

year created: 1991

Z++ - Object-oriented extension of Z. "Z++, an Object-Oriented Extension to Z", Lano, Z User Workshop, Oxford 1990, Springer Workshops in Computing, 1991, pp.151-172.

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

Zambia

“Bantu-speaking groups mainly from the Luba and Lunda Kingdoms in the Congo River Basin and from the Great Lakes region in East Africa settled in what is now Zambia beginning around 300 CE, displacing and mixing with previous population groups in the region. The Mutapa Empire developed after the fall of Great Zimbabwe to the south in the 14th century and ruled the region, including large parts of Zambia, from the 14th to 17th century. The empire collapsed as a result of the growing slave trade and Portuguese incursions in the 16th and 17th centuries. The region was further

influenced by migrants from the Zulu Kingdom to the south and the Luba and Lunda Kingdoms to the north after invading colonial and African powers displaced local residents into the area around the Zambezi River, in what is now Zambia. In the 1880s, British companies began securing mineral and other economic concessions from various local leaders. The companies eventually claimed control of the region and incorporated it as the protectorate of Northern Rhodesia in 1911. The UK Government took over administrative control from the British South Africa Company in 1924. During the 1920s and 1930s, advances in mining spurred British economic ventures and colonial settlement.

Northern Rhodesia's name was changed to Zambia upon independence from the UK in 1964 under independence leader and first President Kenneth KAUNDA. In the 1980s and 1990s, declining copper prices, economic mismanagement, and a prolonged drought hurt the economy. Elections in 1991 brought an end to one-party rule and propelled the Movement for Multiparty Democracy (MMD) into power. The subsequent vote in 1996, however, saw increasing harassment of opposition parties and abuse of state media and other resources. The election in 2001 was marked by administrative problems, with three parties filing a legal petition challenging the election of ruling party candidate Levy MWANAWASA. MWANAWASA was reelected in 2006 in an election that was deemed free and fair. Upon his death in August 2008, he was succeeded by his vice president, Rupiah BANDA, who won a special presidential byelection later that year. The MMD and BANDA lost to the Patriotic Front (PF) and Michael SATA in the 2011 general elections. SATA, however, presided over a period of haphazard economic management and attempted to silence opposition to PF policies. SATA died in October 2014 and was succeeded by his vice president, Guy SCOTT, who served as interim president until January 2015, when Edgar LUNGU won the presidential byelection and completed SATA's term. LUNGU then won a full term in August 2016 presidential elections. Hakainde HICHILEMA was elected president in August 2021.” —[CIA World Factbook](#)

See: **.zap** — file extension

ZAP

programming language

year created: 1982



ZAP - Language for expressing transformational developments. “A System

for Assisting Program Transformation”, M.S. Feather, ACM TOPLAS 4(1):1-20 (Jan 1982).

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Frank Zappa

“Politics is the entertainment division of the Military Industrial Complex.” —Frank Zappa

“The United States is a nation of laws: badly written and randomly enforced.” —Frank Zappa

“Civics was a class that used to be required before you could graduate from high school. You were taught what was in the U.S. Constitution.

After after all the student rebellions in the Sixtie4s, civics was banished from the student curriculum and was replaced by something called social styudies. Here we live in a country that has a fabulous constitution and all these guarantees, a contract between the citizens and the government — nobody knows what’s in it.

And so, if you don’t know what your rights are, how can you stand up for them? And furthermore, if you don’t know whats in the document, how can you care if someone is shredding it?” —Frank Zappa

“If you wind up with a boring, miserble life because you listened to your mother, your Dad, your priest, to some guy on television, to any of the people telling you how to do your shit, then you deserve it.” —Frank Zappa, *The Real Frnk Zappa Book*, 1990

Sheikh Zayed Grand Mosque

28 December 2023: “The Sheikh Zayed Grand Mosque, located in United Arab Emirates’ capital Abu Dhabi, is the largest mosque in the country. Constructed between 1996 and 2007, the Grand Mosque contains design elements borrowed from other Islamic countries, including Egypt, Morocco, Pakistan, and Turkey. Its main axis is rotated about 11° south of true west, aligning it in the direction of the Kaaba in Mecca, Saudi Arabia. Natural materials, such as marble, gold, semi-precious stones, crystals, and ceramics were used in construction due to their long-lasting qualities.” —CIA World Factbook (material that expires after 30 days)



Zed

programming language

year created: 1978

“

Zed - 1978. Software Portability Group, U Waterloo. Eh, with types added. Similar to C. Implementation language for the Thoth realtime operating system. Added a few simple types for greater efficiency on byte-addressed machines. String constants in case statements. Enforces the naming convention: MANIFESTS, Externals and locals. "Porting the Zed Compiler", G.B. Bonkowski et al, SIGPLAN Notices 14(8):92-97 (Aug 1979).

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

ZENO

programming language

year created: 1978

“

ZENO - U Rochester 1978. Euclid with asynchronous message-passing.
"Preliminary ZENO Language Description", J.E. Ball et al, SIGPLAN Notices
14(9):17-34 (Sep 1979).

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

zeptosecond

“The zeptosecond is a unit of time equal to 0.000 000 000 000 000 000 001 seconds, that is, 10^{-21} seconds: it's the smallest sliver of time yet measured and corresponds to the amount of time it takes for the electron to be ejected after the photon strike” —[Massimo](#)

zero

keyword: COBOL reserved word (z/OS)

ZERO

programming language

year created: 1992

“

ZERO - Object oriented extension of Z. "Object Orientation in Z", S.
Stepney et al eds, Springer 1992.

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

zeroes

keyword: COBOL reserved word (z/OS)

zeros

keyword: COBOL reserved word (z/OS)

ZEST

programming language

year created: 1992

“

ZEST - Object oriented extension of Z. "Object Orientation in Z", S. Stepney et al eds, Springer 1992.

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

magnusoft ZETA

operating system

Proprietary OS developed by yellowTAB, based on BeOS r5.1d0 source code.

—[Wikipedia: List of operating systems](#)

ZetaLisp

programming language

year created: 1981

‘

ZetaLisp - Maclisp dialect used on the LISP Machine. The many extensions to Maclisp include vectors, closures, flavors, stack groups, locatives and invisible pointers. "LISP Machine Manual", D. Weinreb and D. Moon, MIT AI Lab, 1981.

—***The Language List:** information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

ZIL

abbreviation

programming language

‘

ZIL - Zork Implementation Language. Language used by Infocom's Interactive Fiction adventure games. Interpreted by the zmachine, for Unix and Amiga.

`ftp://plains.nodak.edu/Minix/st.contrib.Infocom.tar.Z`

—***The Language List:** information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Zimbabwe

26 August 2023: “Rising political tensions in the [Zimbabwe] have spawned fears of post-election violence among residents in the capital Harare, as ballot tabulation continues a day after voting ended.

Zimbabwe held general elections on Wednesday and Thursday, pitting President Emmerson Mnangagwa against Nelson Chamisa of the Citizens Coalition for Change, the main opposition party.” —[Aljazeera](#)

27 August 2023: “Zimbabwe’s President Emmerson Mnangagwa has won a second and final term in office in an outcome rejected by the opposition and questioned by observers.

Mnangagwa, who took over from longtime leader Robert Mugabe after a 2017 army coup, was widely expected to secure re-election despite the country’s continuing economic crisis, with analysts saying the contest was heavily skewed in favour of the ZANU-PF party, which has ruled the country since independence and the end of white minority rule in 1980.

Mnangagwa won 52.6 percent of the vote compared with 44 percent for Nelson Chamisa, his main challenger, according to official results announced by the Zimbabwe Electoral Commission (ZEC) late on Saturday.” —[Aljazeera](#)

“The hunter-gatherer San people first inhabited the area that eventually became Zimbabwe. Farming communities migrated to the area around 500CE during the Bantu expansion, and Shona-speaking societies began to develop in the Limpopo valley and Zimbabwean highlands around the 9th century. These societies traded with Arab merchants on the Indian Ocean coast and organized under the Kingdom of Mapungubwe in the 11th century. A series of powerful trade-oriented Shona states succeeded Mapungubwe, including the Kingdom of Zimbabwe (ca. 1220-1450), Kingdom of Mutapa (ca. 1450-1760), and the Rozwi Empire. The Rozwi Empire expelled Portuguese colonists from the Zimbabwean plateau but was eventually conquered in 1838 by the Ndebele clan of Zulu general MZILIKAZI during the era of conflict and population displacement known as the Mfecane. In the 1880s, colonists arrived with the British South Africa Company (BSAC) and obtained a written concession for mining rights from Ndebele King LOBENGULA. The king later disavowed the concession and accused the BSAC agents of deceit. The BSAC annexed Mashonaland and subsequently conquered Matabeleland by force during the First Matabele War of 1893-1894 to establish company rule over the territory. BSAC holdings south of the Zambezi River were annexed by the UK in 1923 and became the British colony of Southern Rhodesia. The 1930 Land Apportionment Act restricted Black land ownership and established structural racial inequalities that would favor the White minority for decades. A new constitution in 1961 further cemented White minority rule.

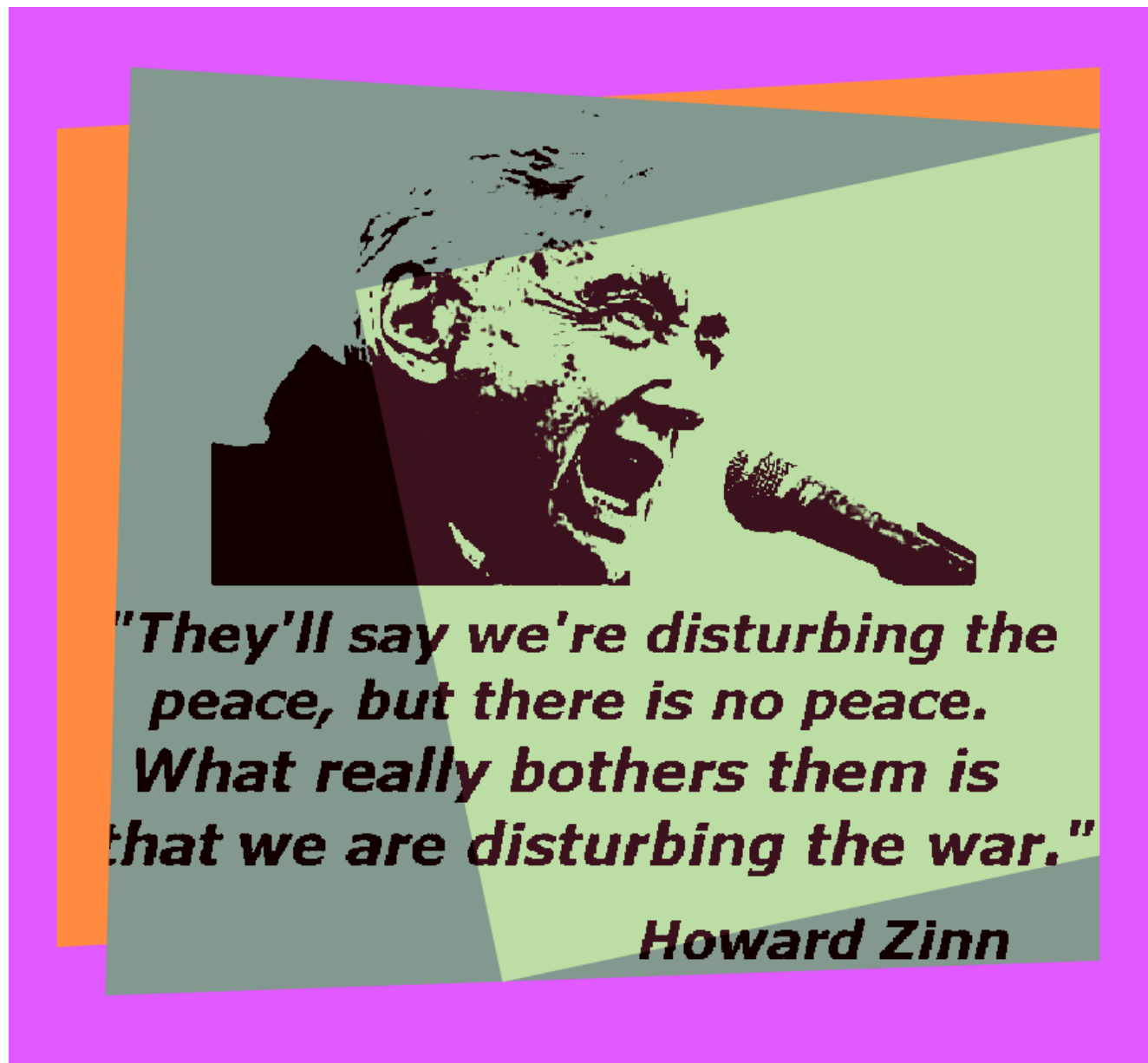
In 1965, the government under White Prime Minister Ian SMITH unilaterally declared its independence from the UK. London did not recognize Rhodesia’s independence and demanded more voting rights for the Black majority in the country. International diplomacy and a liberation struggle by Black Zimbabweans led to biracial elections in 1979 and independence (as Zimbabwe) in 1980. Robert MUGABE, who led the uprising and became the nation’s first prime minister, was the country’s only ruler (as president since 1987) from independence until November 2017, when loss of support from his political party and the country’s military forced his resignation. In the mid-1980s, the government tortured and killed thousands of civilians in a crackdown on dissent known as the Gukurahundi campaign. Economic mismanagement and chaotic implementation of land redistribution policies following

independence periodically crippled the economy and resulted in widespread shortages of basic commodities. General elections in 2002, 2008, and 2013 were severely flawed and widely condemned but allowed MUGABE to remain president. In November 2017, Vice President Emmerson MNANGAGWA became president following a military intervention led by Constantino CHIWENGA that forced MUGABE to resign, and MNANGAGWA cemented power by sidelining rivals Grace MUGABE (Robert MUGABE's wife) and her faction of the ruling Zimbabwe African National Union-Patriotic Front party. In July 2018, MNANGAGWA won the presidential election after a close contest with opposition candidate Nelson CHAMISA. MNANGAGWA has maintained the government's longstanding practice of violently disrupting protests and opposition rallies and politicizing institutions. Economic conditions remain dire under MNANGAGWA.” —[CIA World Factbook](#)

zinc

the chemical element of atomic number 30, a silvery-white metal that is a constituent of brass and is used for coating (galvanizing) iron and steel to protect against corrosion.

Howard Zinn



"They'll say we're disturbing the peace, but there is no peace. What really bothers them is that we are disturbing the war." —Howard Zinn

See: `.zip` — file extension

zipcode

programming language

“

Zipcode - [?] Parallel language at Lawrence Livermore?

—*The Language List: information from The Language List, started 7 March 1991*
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas

zip gun

noun “A noncommercially produced weapon capable of firing a projectile by force of an explosion or other form of combustion (Penal Code Section 17360)” [from Basic Course Workbook Series, Student Materials, Learning Domain 40, Weapons Violations, Version 6.7, California Commission on Peace Officer Standards and Training]

Zong massacre

On 29 November 1781, the slavers on the ship the *Zong* threw 54 women and children slaves through cabin windows into the sea. On 1 December, 42 male slaves were thrown overboard and 36 more over the next few days, for a total of 142 people killed.

The ship had made a navigational mistake and was low on water. If the slaves died of dehydration the ship captain couldn't collect insurance. Under the law of “general average”, if a captain jettisons part of his cargo to save the rest, he can collect insurance on the loss.

ZOPL

abbreviation

programming language

“

ZOPL - Geac. [?] A low-level Pascal?

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

zsh

abbreviation

programming language

“

Sh with list processing and database enhancements.
ftp://cs.ucsd.edu/pub/zsh/zsh2.1.0.tar.Z

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

ZUG

programming language

“

ZUG - Geac. [?] A low-level Awk?

—***The Language List:** information from *The Language List*, started 7 March 1991
by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Zuse

programming language

year created: 1991

‘

Zuse - (named for Konrad Zuse, the designer of the first modern programming language [Plankalkul](#).) Christian Collberg <collberg@dna.lth.se>, PhD thesis 1991. A descendant of [Ada](#), Modula-2, Mesa and Oberon-1 supporting several levels of information hiding. The Zuse type system includes fully hidden types (similar to Modula-2 opaque types but without any implementation restriction), semi-open pointer types (same as Modula-2 opaque types), extensible record types (similar to Oberon-1 public projection types but without the compiler hint), enumeration types, extensible enumeration types, and extensible subrange types. A type can also be protected by specifying the operations that particular modules may perform (similar to C++ friend classes and [Ada](#) private types). Zuse also includes hidden and extensible constants and hidden inline procedures. In order to support the higher levels of information hiding the implementation employs partial intermediate code linking. Version for Sun-3.

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

Zz

programming language

‘

Zz - An extensible language.

<http://slacvm.slac.stanford.edu:5080/FIND/FREEHEP/NAME/ZZ/FULL>

—*The Language List: information from The Language List, started 7 March 1991 by Tom Rombouts, then continued by Bill Kinnersley of University of Kansas*

digits

digits 0 1 2 3 4 5 6 7 8 9

0
1
2
Euler's Number
3
π
4
5
6
7
8
9



zero

0

ASCII: 30 hex

UNICODE: DIGIT ZERO

decimal: 0

hexadecimal: 0x00

duodecimal: 0

octal: 0

binary: 0

English: zero

Chinese (漢語): 零 (ling)

French (français): zéro

German (Deutsch): null

Italian (italiano): zero

Japanese (日本語): 零 (rei)

Spanish (español): cero

1

one

1

one

ASCII: 31 hex

UNICODE: DIGIT ONE

decimal: 1

hexadecimal: 0x01

duodecimal: 1

octal: 01

binary: 1

English: one

Chinese (漢語): 一 (yi)

French (français): un(e)

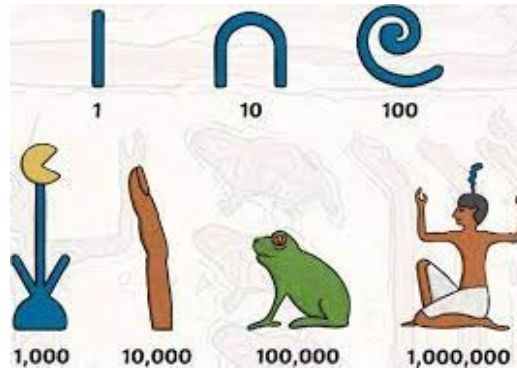
German (Deutsch): ein(s)

Italian (italiano): uno, una

Japanese (日本語): 一 (ichi)

Spanish (español): uno, una, un

12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!” — [Dr Campbell Price](#)



square: 1

square root: 1

1410 Processor Operating System (PR-155)

operating system

Proprietary OS by IBM

for the 1410 and 7010 — [Wikipedia: List of operating systems](#)

2

two

2

two

ASCII: 32 hex

UNICODE: DIGIT TWO

decimal: 2

hexadecimal: 0x02

duodecimal: 2

octal: 02

binary: 10

English: two

Chinese (漢語): 二 (er)

French (français): deux

German (Deutsch): zwei


Italian (italiano): due

Japanese (日本語): 二 (ni)

Spanish (español): dos

square: 4

square root: approximately 1.41421356237...

See: .264  — file extension

2023 bank crisis

In March 2023 three U.S. banks failed.

Silvergate Bank failed on 8 March 2023.

Silivcon Valley Bank (SVB) was placed into receivership on 10 March 2023.

Signature Bank was closed on 12 March 2023.

During this banking crisis, several members of Congress used their political influence and inside knowledge to engage in trading on banks.

Representative Jared Moskowitz sold shares of Seacoast Banking Corporation worth \$65,000 to \$150,000 on March 10th. \$SBCF fell 20% afterwards. — source: [unusual_whales](#)

Representative Dan Goldman, a Democrat, sold shares of First Republic Bank, \$FRC, on March 15. Dan Goldman has been making hundreds of stock trades since he started his congressional duty. — source: [unusual_whales](#)

The wife and children of Representative Ro Khanna, sold First Republic, \$FRC, on March 15th. — source: [unusual_whales](#)

Representative John Curtis, Republican, sold shares in First Republic, \$FRC, on March 16, the day the "bailout" occurred. — source: [unusual_whales](#)

Representative Nicole Malliotakis, a Republican from New York, bought shares of New York Community Bancorp, \$NYCB, after private discussions with NY bank regulators and labeled it as her spouse despite single. The stock rallied 40% two days

later after buying Signature assets. — source: [unusual_whales](#)

Many members said it was their trust or advisors, not them trading, to the *New York Times*. Yet once again during crisis, Congressional portfolios benefited while the public panicked. — source: [unusual_whales](#)

Euler's Number

Euler's Number

π

Approximately 2.7182...

3

three

3

three

ASCII: 33 hex

UNICODE: DIGIT THREE

decimal: 3

hexadecimal: 0x03

duodecimal: 3

octal: 03

binary: 11

English: three

Chinese (漢語): 三 (san)

French (français): trois

German (Deutsch): drei


Italian (italiano): tre


Japanese (日本語): 三 (san)


Spanish (español): tres

square: 9

square root: approximately 1.73205080757...

See: .3g2  — file extension

See: .3ga  — file extension

See: .3gp  — file extension

π

pi

π

π

Approximately 3.14.159...

Also known as Archimedes' Constant.

4

four

4

four

ASCII: 34 hex

UNICODE: DIGIT FOUR

decimal: 4

hexadecimal: 0x04

duodecimal: 4

octal: 04

binary: 100

English: four

Chinese (漢語): 四 (si)

French (français): quatre

German (Deutsch): vier

Italian (italiano): quattro

Japanese (日本語): 四 (yon)

Spanish (español): cuatro

square: 16

square root: 2

4 Children for Sale

from 1948: “The story behind the infamous “4 Children for Sale” photograph in 1948 is heartbreaking.

Lucille Chalifoux, the mother in the photo, was facing eviction from her apartment and, with no other options, made the difficult decision to sell her four children.

The photo captured the attention of the public when it was published in the local newspaper.

Offers of support and job opportunities poured in, but unfortunately, they were not enough to save the children from their challenging fate.

The youngest child, David, was adopted by Harry and Luella McDaniel, who provided him with a stable and safe home.

While his upbringing was strict, he eventually found stability and served in the military for 20 years before working as a truck driver.

However, the older siblings, RaeAnn and Milton, had a much more harrowing experience. They were sold to a couple named John and Ruth Zoeteman, who treated them as property rather than children.

They were chained up in a barn and subjected to physical and emotional abuse. RaeAnn, in particular, had a traumatic upbringing, including an incident of kidnapping, rape, and pregnancy in her teenage years.

Despite their hardships, both RaeAnn and Milton were able to reconnect as adults. Unfortunately, their sister Lana passed away before they could reunite.

Another sibling, Sue Ellen, was in the late stages of lung disease at the time of the reunion but could express her love for her siblings through written communication.

Sue Ellen’s words for the birth mother that sold them: “She needs to be in hell burning.”” —[Fascinating](#)



5

five

5

five

ASCII: 35 hex

UNICODE: DIGIT FIVE

decimal: 5

hexadecimal: 0x05

duodecimal: 5

octal: 05

binary: 101

English: five

Chinese (漢語): 五 (wu)

French (français): cinq

German (Deutsch): fünf

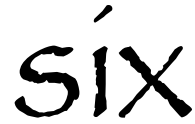
Italian (italiano): cinque

Japanese (日本語): 五 (go)

Spanish (español): cinco

square: 25

square root: approximately 2.2360679775...

A large, handwritten-style digit '6' in black ink, positioned at the top center of the page.A large, stylized word 'SIX' in black ink, positioned below the digit '6'. The letters are bold and have a slightly irregular, hand-drawn appearance.

6

six

ASCII: 36 hex

UNICODE: DIGIT SIX

decimal: 6

hexadecimal: 0x06

duodecimal: 6

octal: 06

binary: 110

English: six

Chinese (漢語): 六 (liu)

French (français): six

German (Deutsch): sechs

Italian (italiano): sei

Japanese (日本語): 六 (roku)

Spanish (español): seis

square: 36

square root: approximately 2.44948974278...

A large, hand-drawn number 7 in a black, slightly irregular font.The word "seven" in a large, black, serif font.A large, black, serif number 7.

seven

ASCII: 37 hex

UNICODE: DIGIT SEVEN

decimal: 7

hexadecimal: 0x07

duodecimal: 7

octal: 07

binary: 111

English: seven

Chinese (漢語): 七 (qi)

French (français): sept

German (Deutsch): sieben

Italian (italiano): sette

Japanese (日本語): 七 (shichi/nana)

Spanish (español): siete

square: 49

square root: approximately 2.64575131106...

7040/7044 Operating System (16/32K)

operating system

Proprietary OS by IBM

7040-PR-150 — [Wikipedia: List of operating systems](#)

.7z

file extension

Compression: 7-Zip compressed file

8

eight

8

eight

ASCII: 38 hex

UNICODE: DIGIT EIGHT

decimal: 8

hexadecimal: 0x08

duodecimal: 8

octal: 010

binary: 1000

English: eight

Chinese (漢語): 八 (ba)

French (français): huit

German (Deutsch): acht

Italian (italiano): otto

Japanese (日本語): 八 (hachi)

Spanish (español): ocho

square: 64

square root: approximately 2.82842712475...

9

nine

9

nine

ASCII: 39 hex

UNICODE: DIGIT NINE

decimal: 9

hexadecimal: 0x09

duodecimal: 9

octal: 011

binary: 1001

English: nine

Chinese (漢語): 九 (jiu)

French (français): neuf

German (Deutsch): neun

Italian (italiano): nove

Japanese (日本語): 九 (kyū/ku)

Spanish (español): nueve

square: 81

square root: 3

10

ten

10

ten

decimal: 10

hexadecimal: 0x0a

duodecimal: A

octal: 012

binary: 1010

English: ten

Chinese (漢語): 十 (shi)

French (français): dix

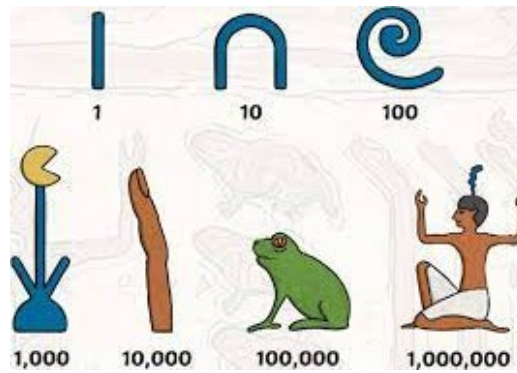
German (Deutsch): zehn

Italian (italiano): dieci

Japanese (日本語): 十 (jū/juu)

Spanish (español): diez

12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!” —[Dr Campbell Price](#)



square: 100

square root: approximately 3.16227766017...

11

eleven

11

eleven

decimal: 11

hexadecimal: 0x0b

duodecimal: B

octal: 013

binary: 1011

English: eleven

Chinese (漢語): 十一 (shiyi)

French (français): onze

German (Deutsch): elf

Italian (italiano): undici

Japanese (日本語): 十一 (jū ichi/juuichi)

Spanish (español): once

square: 121

square root: approximately 3.31662479036...

12

twelve

12

twelve

decimal: 12

hexadecimal: 0x0c

duodecimal: 10

octal: 014

binary: 1100

English: twelve

Chinese (漢語): 十二 (shier)

French (français): douze

German (Deutsch): zwölf

Italian (italiano): dodici

Japanese (日本語): 十二 (jū ni/juuni)

Spanish (español): doce

square: 144

square root: approximately 3.46410161514...

13

thirteen

13

thirteen

decimal: 13

hexadecimal: 0x0d

duodecimal: 11

octal: 015

binary: 1101

English: thirteen

Chinese (漢語): 十三 (shisan)

French (français): treize

German (Deutsch): dreizehn

Italian (italiano): tredici

Japanese (日本語): 十三 ((jū san/juusan)

Spanish (español): trece

square: 169

square root: approximately 3.60555127546...

14

fourteen

14

fourteen

decimal: 14

hexadecimal: 0x0e

duodecimal: 12

octal: 016

binary: 1110

English: fourteen

Chinese (漢語): 十四 (shisi)

French (français): quatorze

German (Deutsch): vierzehn

Italian (italiano): quattordici

Japanese (日本語): 十四 (jū yon/juushi)

Spanish (español): catorce

square: 196

square root: approximately 3.74165738677...

15

fifteen

15

fifteen

decimal: 15

hexadecimal: 0x0f

duodecimal: 13

octal: 017

binary: 1111

English: fifteen

Chinese (漢語): 十五 (shiwu)

French (français): quinze

German (Deutsch): fünfzehn

Italian (italiano): quindici

Japanese (日本語): 十五 (jū go/juugo)

Spanish (español): quince

square: 225

square root: approximately 3.87298334621...

16

sixteen

16

sixteen

decimal: 16

hexadecimal: 0x10

duodecimal: 14

octal: 020

binary: 10000

English: sixteen

Chinese (漢語): 十六 (shiliu)

French (français): seize

German (Deutsch): sechzehn

Italian (italiano): sedici

Japanese (日本語): 十六 ((jū roku/juuroku)

Spanish (español): dieciséis

square: 256

square root: 4

17

seventeen

17

seventeen

decimal: 17

hexadecimal: 0x11

duodecimal: 15

octal: 021

binary: 10001

English: seventeen

Chinese (漢語): 十七 (shiqi)

French (français): dix-sept

German (Deutsch): siebzehn

Italian (italiano): diciassette

Japanese (日本語): 十七 (jū nana/juushichi)

Spanish (español): diecisiete

square: 289

square root: approximately 4.12310562562...

18

eighteen

18

eighteen

decimal: 18

hexadecimal: 0x12

duodecimal: 16

octal: 022

binary: 10010

English: eighteen

Chinese (漢語): 十八 (shiba)

French (français): dix-huit

German (Deutsch): achtzehn

Italian (italiano): diciotto

Japanese (日本語): 十八 ((jū hachi/juuhachi)

Spanish (español): dieciocho

square: 324

square root: approximately 4.24264068712...

19

nineteen

19

nineteen

decimal: 19

hexadecimal: 0x13

duodecimal: 17

octal: 023

binary: 10011

English: nineteen

Chinese (漢語): 十九 (shíjiǔ)

French (français): dix-neuf

German (Deutsch): neunzehn

Italian (italiano): diciannove

Japanese (日本語): 十九 (jū kyū/juuku)

Spanish (español): diecinueve

square: 361

square root: approximately 4.35889894354...

20

twenty

20

twenty

decimal: 20

hexadecimal: 0x14

duodecimal: 18

octal: 024

binary: 100100

English: twenty

Chinese (漢語): 二十 (ershi)

French (français): vingt

German (Deutsch): zwanzig

Italian (italiano): venti

Japanese (日本語): 二十 (ni-jū/nijuu)

Spanish (español): veinte

square: 400

square root: approximately 4.472135955...

21

twenty-one

21

twenty-one

decimal: 21

hexadecimal: 0x15

duodecimal: 19

octal: 025

binary: 100101

English: twenty-one

Chinese (漢語): 二十一 (ershíyī)

French (français): vingt et un

German (Deutsch): einundzwanzig

Italian (italiano): ventuno

Japanese (日本語): 二十一 (nijūichi)

Spanish (español): veintiuno

square: 441

square root: approximately 4.58257569496...

22

twenty-two

22

twenty-two

decimal: 22

hexadecimal: 0x16

duodecimal: 1a

octal: 026

binary: 100110

English: twenty-two

Chinese (漢語): 二十二 (ershier)

French (français): vingt-deux

German (Deutsch): zweiundzwanzig

Italian (italiano): ventidue

Japanese (日本語): 二十二 (nijuuni)

Spanish (español): veintidos

23

twenty-three

23

twenty-three

decimal: 23

hexadecimal: 0x17

duodecimal: 1b

octal: 027

binary: 100111

English: twenty-three

Chinese (漢語): 二十三 (ershisan)

French (français): vingt-trois

German (Deutsch): dreiundzwanzig

Italian (italiano): ventitre

Japanese (日本語): 二十三 (nijuusan)

Spanish (español): veintitres

24

twenty-four

24

twenty-four

decimal: 24

hexadecimal: 0x18

duodecimal: 20

octal: 030

binary: 101000

English: twenty-four

Chinese (漢語): 二十四 (ershisi)

French (français): vingt-quatre

German (Deutsch): vierundzwanzig

Italian (italiano): ventiquattro

Japanese (日本語): 二十四 (nijuushi)

Spanish (español): veinticuatro

25

twenty-five

25

twenty-five

decimal: 25

hexadecimal: 0x19

duodecimal: 21

octal: 031

binary: 101001

English: twenty-five

Chinese (漢語): 二十五 (ershíwǔ)

French (français): vingt-cinq

German (Deutsch): fünfundzwanzig

Italian (italiano): venticinque

Japanese (日本語): 二十五 (nijuugo)

Spanish (español): veinticinco

26

twenty-six

26

twenty-six

decimal: 26

hexadecimal: 0x1a

duodecimal: 22

octal: 032

binary: 101010

English: twenty-six

Chinese (漢語): 二十六 (ershiliu)

French (français): vingt-six

German (Deutsch): sechsundzwanzig

Italian (italiano): ventisei

Japanese (日本語): 二十六 (nijuuroku)

Spanish (español): veintiséis

27

twenty-seven

27

twenty-seven

decimal: 27

hexadecimal: 0x1b

duodecimal: 23

octal: 033

binary: 101011

English: twenty-seven

Chinese (漢語): 二十七 (ershíqī)

French (français): vingt-sept

German (Deutsch): siebenundzwanzig

Italian (italiano): ventisette

Japanese (日本語): 二十七 (nijuushichi)

Spanish (español): veintisiete

28

twenty-eight

28

twenty-eight

decimal: 28

hexadecimal: 0x1c

duodecimal: 24

octal: 034

binary: 101100

English: twenty-eight

Chinese (漢語): 二十八 (ershíba)

French (français): vingt-huit

German (Deutsch): achtundzwanzig

Italian (italiano): ventotto

Japanese (日本語): 二十八 (nijuuhachi)

Spanish (español): veintiocho

29

twenty-nine

29

twenty-nine

decimal: 29

hexadecimal: 0x1d

duodecimal: 25

octal: 035

binary: 101101

English: twenty-nine

Chinese (漢語): 二十九 (ershijiu)

French (français): vingt-neuf

German (Deutsch): neunundzwanzig

Italian (italiano): ventinove

Japanese (日本語): 二十九 (nijuuku)

Spanish (español): veintinueve

30

thirty

30

thirty

decimal: 30

hexadecimal: 0x1e

duodecimal: 26

octal: 036

binary: 101110

English: thirty

Chinese (漢語): 三十 (sanshi)

French (français): trente

German (Deutsch): dreißig

Italian (italiano): trenta

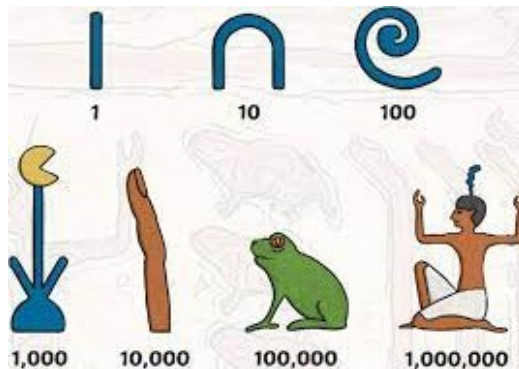
Japanese (日本語): 三十 (san-jū/sanjuu)

Spanish (español): treinta

100

hundred

12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!” — [Dr Campbell Price](#)



808

eight oh eight

808

eight nundred eight

eight oh eight

808

23 September 2023: “808 eq cheat sheet” — [Solar Heavy](#)

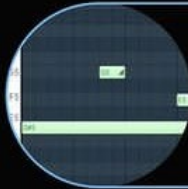
808 EQ CHEATSHEET



- Use a low shelf filter to remove low-end rumble between 0-30hz
- Boost around 40-80Hz if your 808 lacks energy
- Look for unwanted freqs between 100-150Hz & use a small Q to cut them out
- Boost around 200-250Hz if your 808 lacks punch
- Usually there is nothing going in the top-end of 808s, but sometimes you can find the transient between 2-kHz

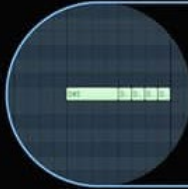
20 November 2023: “808 cheat sheet” — [Solar Heavy](#)

4 WAYS TO MAKE BETTER 808!



SLIDES

Add slides for more bounce.



STUTTER

Add stutter notes for extra punch.



GRID

Add 1/3 or 1/6 grids.



EFFECTS

Add distortion or saturation for more body.

911

nine one one

911

nine hundred eleven

nine one one

9-1-1: emergency number in the U.S.

According to the American Academy of Pediatrics, “Children’s ability to call 911 can save lives.”

Because “nearly 80% of children use devices for media by 2 to 4 years of age”, the AAC recommends that schools teach all children how to call 9-1-1.

9/11: terrorist attack on the U.S.

12 September 2001 “The towers are gone now, reduced to bloody rubble, along with all hopes for Peace in Our Time, in the United States or any other country. Make no mistake about it: We are At War now — with somebody — and we will stay At War with that mysterious Enemy for the rest of our lives.” —Hunter S. Thompson

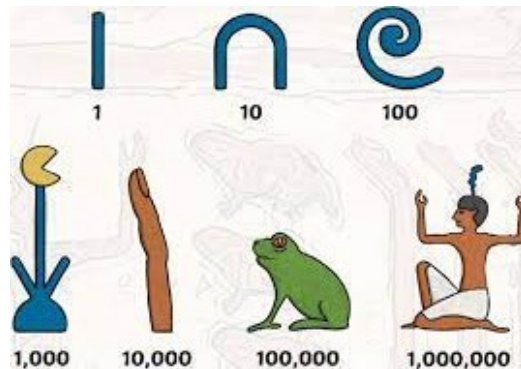
“R.I.P. to the 2,996 Americans who died on 9/11

And R.I.P. to the 1,455,590 innocent Muslims who died during the U.S. invasion for something they didn’t do.” —[Dark Warlord](#)

1,000

thousand

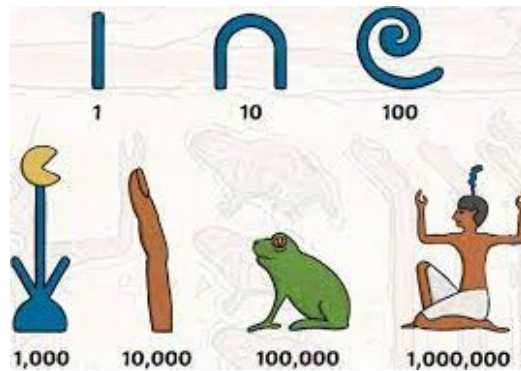
12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!” — [Dr Campbell Price](#)



10,000

ten thousand

12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!” — [Dr Campbell Price](#)



23,456,789

23,456,789

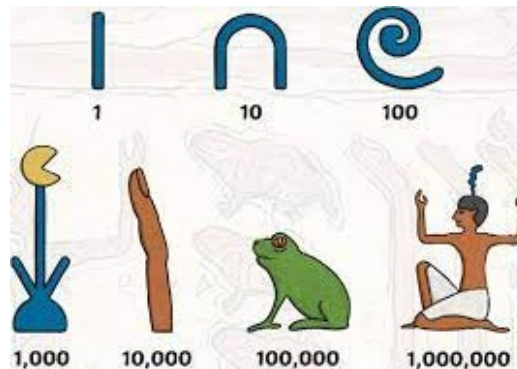
the targets prime number using strictly increasing decimal digits.

decimal: 23456789

100,000

hundred thousand

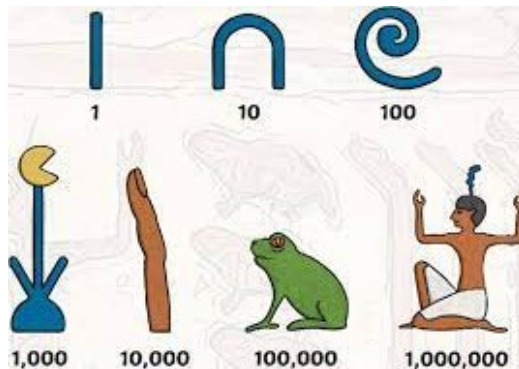
12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!” — [Dr Campbell Price](#)



1,000,000

million

12 January 2024: “Fertility and multiplicity - a frog hieroglyph writes the number 100,000!” — [Dr Campbell Price](#)



control codes

NULL
SOH (start of heading)
STX (start of text)
ETX (end of text)
EOT (end of transmission)
SEL (select)
ENQ (enquiry)
ACK (acknowledge)
RNL (require new line)
BELL
BS (backspace)
GE (graphic escape)
HT (horizontal tabulation)
SPS (superscript)
LF (line feed) or NL (new line)
RPT (repeat)
VT (vertical tabulation)

FF (form feed)
CR (carriage return)
SO (shift out)
SI (shift in)
DLE (data link escape)
DC1 (device control 1) or XON (transmit on)
DC2 (device control 2) or TAPE
DC3 (device control 3) or XOFF (transmit off)
DC4 (device control 4) or TAPE
RES/ENP (retore, enable presentataion)
NAK (negative acknowledge)
NL (new line)
SYNC (synchronous idle)
ETB (end of transmission block)
POC (program operator control)
CAN (cancel)
EM (end of medium)
SUB (substitute)
UBS (unit backspace)
ESC (escape)
CU1 (customer use one)
FS (file separator)

GS (group separator)
RS (record separator)
US (unit separator)
IUS/ITB (intermediate transmisson block)
DS (digit select)
SOS (start of significance)
FS (field separator)
WUS (word underscore)
DEL (delete)

SOH

start of heading

SOH — Start of Heading

ASCII: 01 hex (originally [1963] called SOM)

EBCDIC: 01 hex

UNICODE: START OF HEADING

STX

start of text

STX — Start of Text

ASCII: 02 hex (originally [1963] called EOA)

EBCDIC: 02 hex

UNICODE: START OF TEXT

ETX

end of text

ETX — End of Text

ASCII: 03 hex (originally [1963] called EOM)

EBCDIC: 03 hex

UNICODE: END OF TEXT

EOT
end of
transmission

EOT — End of Transmission

ASCII: 04 hex

UNICODE: END OF TRANSMISSION

EOT

SEL — Select

SEL — Select

EBCDIC: 04 hex

Device control character taking a single-byte parameter

ENQ

enquíry

ENQ — Enquiry

ASCII: 05 hex (originally [1963] called WRU)

UNICODE: ENQUIRY

ACK

acknowledge

ACK — Acknowledge

ASCII: 06 hex (originally [1963] called RU)

UNICODE: ACKNOWLEDGE

RNL

require new line

RNL — Require New Line

EBCDIC: 06 hex

Line-break resetting indent Tab mode

BEL

bell

BEL — BELL

ASCII: 07 hex (originally [1963] called BELL)

UNICODE: BELL

Control-G

BS

backspace

BS — Backspace

ASCII: 08 hex (originally [1963] called FE0)

EBCDIC: 16 hex

UNICODE: BACKSPACE

GE

graphic escape

GE — Graphic Escape

EBCDIC: 08 hex

Non-locking shift that changes the interpretation of the following character

HT

horizontal tabulation

HT — Horizontal Tabulation

ASCII: 09 hex (originally [1963] called either HT or SK)

EBCDIC: 05 hex

UNICODE: CHARACTER TABULATION

Also known as tab.

SPS

superscript

SPS — Superscript

EBCDIC: 09 hex

Begin superscript or undo subscript.

LF

line feed

LF — Line Feed

ASCII: 0A hex (originally [1963] called VTAB)

UNICODE: LINE FEED

Also known as new line (NL)

Also known as end of line (EOL)

RPT

repeat

RPT — Repeat

EBCDIC: 0A hex

Switch to an operation mode repeating a print buffer.

VT

vertical tabulation

VT — Vertical Tabulation

ASCII: 0B hex

EBCDIC: 0B hex

UNICODE: LINE TABULATION

FF

form feed

FF — Form Feed

ASCII: 0C hex

EBCDIC: 0C hex

UNICODE: FORM FEED

SO
shift out

SO — Shift Out

ASCII: 0E hex

EBCDIC: 0E hex

UNICODE: SHIFT OUT

Also knw as LOCKING-SHIFT ONE

SI
shift in

SI — Shift In

ASCII: 0F hex

EBCDIC: 0F hex

UNICODE: SHIFT IN

Also known as LOCKING-SHIFT ZERO

DLE

data link escape

DLE — Data Link Escape

ASCII: 10 hex (originally [1963] called DC0)

EBCDIC: 10 hex

UNICODE: DATA LINK ESCAPE

DC1

device control 1

DC1 — Device Control 1

ASCII: 11 hex

EBCDIC: 11 hex

UNICODE: DEVICE CONTROL ONE

Also known as XON (transmit on); used to start paper tape reader

Control-Q

DC2

device control 2

DC2 — Device Control 2

ASCII: 12 hex

EBCDIC: 12 hex

UNICODE: DEVICE CONTROL TWO

Also known as ~~T~~APE; used to start paper tape punch

Control-R

DC3

device control 3

DC3 — Device Control 3

ASCII: 13 hex

EBCDIC: 13 hex

UNICODE: DEVICE CONTROL THREE

Also known as XOFF (transmit off); used to stop paper tape reader

Control-S

DC4

device control 4

DC4 — Device Control 4

ASCII: 14 hex

UNICODE: DEVICE CONTROL FOUR

Also known as TAPE; used to stop paper tape punch

Control-T

RES/ENP

restore, enable

presentation

RES/ENP — Restore, Enable, Presentation

EBCDIC: 14 hex

Resume output (after BYP/INP).

NAK

negative

acknowledge

NAK — Negative Acknowledge

ASCII: 15 hex (originally [1963] called ERR)

UNICODE: NEGATIVE ACKNOWLEDGE

NL

new line

NL — New Line

extended ASCII: 85 hex

EBCDIC: 15 hex

Line break.

SYN

sync

SYN — Synchronous Idle

ASCII: 16 hex (originally [1963] called SYNC)

UNICODE: SYNCHRONOUS IDLE

ETB

end of

transmission block

ETB — End of Transmission Block

ASCII: 17 hex (originally [1963] called LEM)

UNICODE: END OF TRANSMISSION BLOCK

POC

program operator

communicaton

POC — Program Operator Communicaton

EBCDIC: 17 hex

Followed by two one-byte operators that identify the specific function, for example a light or function key.

CAN

cancel

CAN — Cancel

ASCII: 18 hex (originally [1963] called S0)

EBCDIC: 18 hex

UNICODE: CANCEL

EM

end of medium

EM — End of Medium

ASCII: 19 hex (originally [1963] called S1)

EBCDIC: 19 hex

UNICODE: END OF MEDIUM

SUB

substitute

SUB — Substitute

ASCII: 1A hex (originally [1963] called S2; then [1965] called SS)

UNICODE: SUBSTITUTE

UBS

unit backspace

UBS — Unit Backspace

EBCDIC: 1A hex

A fractional backspace.

ESC

escape

ESC — Escape

ASCII: 1B hex (originally [1963] called S3)

UNICODE: ESCAPE

CU1

customer use one

CU1 — Customer Use One

EBCDIC: 1B hex

Not used by IBM; for customer use.

FS

file separator

FS — File Separator

ASCII: 1C hex (originally [1963] called S4)

EBCDIC: 1C hex (called IFS)

UNICODE: INFORMATION SEPARATOR FOUR

GS

group separator

GS — Group Separator

ASCII: 1D hex (originally [1963] called S5)

EBCDIC: 1D hex (called IGS)

UNICODE: INFORMATION SEPARATOR THREE

RS

record separator

RS — Record Separator

ASCII: 1E hex (originally [1963] called S6)

EBCDIC: 1E hex (called IRS)

UNICODE: INFORMATION SEPARATOR TWO

IUS/ITB

intermediate

transmission block

**IUS/ITB — Interchange Unit
Separator/Intermediate Transmission Block**

EBCDIC: 1F hex

Either used as an information separator to terminate a block called a "unit" (as in ASCII; see [US](#)), or used as a transmission control code to delimit the end of an intermediate block.

DS

digit select

DS — Digit Select

EBCDIC: 20 hex

Used by S/360 CPU edit (ED) instruction.

SOS

start of

significance

SOS — Start of Significance

EBCDIC: 21 hex

Used by S/360 CPU edit (ED) instruction.

FS

field separator

FS — Field Separator

EBCDIC: 22 hex

Used by S/360 CPU edit (ED) instruction.

WUS

word underscore

WUS — Word Underscore

EBCDIC: 23 hex

Underscores the immediately preceding word.

DEL

delete

DEL — Delete

ASCII: 7F hex

EBCDIC: 07 hex

UNICODE: DELETE

mathematical operators

+ (plus sign)
- (minus sign)
* (multiplication)
/ (division)
< (less than sign)
= (equals sign)
> (greater than sign)

+

plus sign

+

ASCII: 2B hex

UNICODE: PLUS SIGN

+

keyword: Ada operator

keyword: BASIC operator

operator: addition operator

keyword: JavaScript operator

keyword: Objective-C operator

keyword: Pascal operator

keyword: PHP operator

keyword: PL/I operator

keyword: Python operator

keyword: Ruby operator

`++`

operator: increment operator

`+=`

operator: addition assignment operator



minus sign

-

ASCII: 2D hex

UNICODE: HYPHEN-MINUS

Also known as hyphen

-

keyword: Ada operator

keyword: BASIC operator

operator: subtraction operator

operator: negation operator

keyword: JavaScript operator

keyword: Objective-C operator

keyword: Pascal operator

keyword: PHP operator

keyword: PL/I operator

keyword: Python operator

keyword: Ruby operator

--

operator: decrement operator

--

operator: subtraction assignment operator



asterisk

*

ASCII: 2A hex

UNICODE: ASTERISK

Also known as star

*

keyword: Ada operator

keyword: BASIC operator

operator: indirection operator

operator: multiplication operator

keyword: JavaScript operator

keyword: Objective-C operator

keyword: Pascal operator

keyword: PHP operator

keyword: PL/I operator

keyword: Python operator

keyword: Ruby operator

`*=`

operator: multiplication assignment operator

/

forward slash

/

ASCII: 2F hex

UNICODE: SOLIDUS

Also known as slash

Also known as forward slash

Also known as virgule

/

keyword: Ada operator

keyword: BASIC operator

operator: division operator

keyword: JavaScript operator

keyword: Objective-C operator

keyword: Pascal operator

keyword: PHP operator

keyword: PL/I operator

keyword: Python operator

keyword: Ruby operator

/=

operator: division assignment operator

/boot

directory:

Directory of files needed to boot or start your computer.

/dev

directory:

Directory of the devices connected to your computer (remember, everything, even hardware devices, is treated as a file in UNIX or Linux).

/etc

directory:

Directory of system configuration files, startup procedures, and shutdown procedures.

/home

directory:

The home directories for each user.

/kernel

directory:

Directory of files needed to boot or start your computer.

/lib

directory:

The directory of library files.

/Library

directory:

The directory of library files.

/net

directory:

Directory of other networked systems.

/opt

directory:

Directory of third party software.

/private

directory:

On Mac OS X, this is the location of the UNIX files. It is normally kept hidden from all users in Finder, but is visible in your terminal emulator and shell. Mac OS X has links to the major UNIX directories at the root level so that UNIX and Linux tools can find their files in the standard locations.

/proc

directory:

Directory with information about processes and devices.

/sbin

directory:

Directory with system binaries (programs).

/tmp

directory:

Directory for temporary files.

/users

directory:

The home directories for each user.

/usr

directory:

Directory with user binaries (programs), libraries, manuals, and docs.

/var

directory:

Directory with variable files.

<

less than sign

<

ASCII: 3C hex

UNICODE: LESS-THAN SIGN

<

operator: less than operator

<<

operator: shift left operator

<=

operator: less than or equal operator

<<=

operator: shift left assignment operator

≈

equals sign

=

ASCII: 3D hex

UNICODE: EQUALS SIGN

=

operator: assignment operator

==

operator: equality operator

>

greater than sign

>

ASCII: 3E hex

UNICODE: GREATER-THAN SIGN

>

operator: greater than operator

>>

operator: shift right operator

>=

operator: greater than or equal to operator

>>=

operator: shift right assignment operator

punctuation and symbols

␣ (space character)
! (exclamation mark)
" (quotation mark)
(number sign)
\$ (dollar sign)
% (percent sign)
& (ampersand)
' (apostrophe)
((left parenthesis)
) (right parenthesis)
* (asterisk)
+ (plus sign)
, (comma)

- (hyphen)
. (period)
/ (forward slash)
: (colon)
; (semicolon)
< (less than sign)
= (equals sign)
> (greater than sign)
? (question mark)
@ (commercial at sign)
[(left square bracket)
\ (backslash)
] (right square bracket)
^ (circumflex accent)
_ (underscore)
` (grave accent)
{ (left curly bracket)
 (vertical line)
} (right curly bracket)
~ (tilde)
μ (micro)

␣

space character

␣

ASCII: 20 hex

UNICODE: SPACE

!

exclamation mark

!

ASCII: 21 hex

UNICODE: EXCLAMATION MARK

Also known as factorial

!

operator: logical negation operator

!=

operator: inequality operator

”

quotation mark

”

ASCII: 22 hex

UNICODE: QUOTATION MARK

Also known as double quote

? :

operator: conditional expression operator

#

number sign

#

ASCII: 23 hex

UNICODE: NUMBER SIGN

Also known as pound sign (weight)

Also known as hash tag or hash

\$

dollar sign

\$

ASCII: 24 hex

UNICODE: DOLLAR SIGN

%

percent sign

%

ASCII: 25 hex

UNICODE: PERCENT SIGN

%

operator: modulus operator

%=

operator: modulus assignment operator

See: %ACT

%ACTVATE

keyword: PL/I keyword

Abbreviated: %ACT

Preprocessor statement

%CONTROL

keyword: PL/I keyword

Listing control statement

See: %DCL

See: %DEACT

%DEACTIVATE

keyword: PL/I keyword

Abbreviated: %DEACT

Preprocessor statement

%DECLARE

keyword: PL/I keyword

Abbreviated: %DCL

Preprocessor statement

%DO

keyword: PL/I keyword

Preprocessor statement

%ELSE

keyword: PL/I keyword

Clause of %IF statement

%END

keyword: PL/I keyword

Preprocessor statement

&

ampersand

&

ASCII: 26 hex

UNICODE: AMPERSAND

originally derived from a ligature of 'e' and 't'

&

operator: address operator

operator: bitwise AND operator

amp;amp;

operator: logical AND operator

&=

operator: bitwise AND assignment operator

1

apostrophe

‘

ASCII: 27 hex

UNICODE: APOSTROPHE

Also known as single quote

Also known as APL quote

(

left parenthesis

(

ASCII: 28 hex

UNICODE: LEFT PARENTHESIS

Also known as opening parenthesis

)

right parenthesis

)

ASCII: 29 hex

UNICODE: RIGHT PARENTHESIS

Also known as closing parenthesis

,

comma

,

ASCII: 2C hex

UNICODE: COMMA

,

operator: sequence operator

~

hyphen

-

ASCII: 2D hex

UNICODE: HYPHEN-MINUS

Also known as minus sign

-

operator: subtraction or difference operator

operator: negation operator

->

operator: structure pointer operator

•

period

•

ASCII: 2E hex

UNICODE: FULL STOP

Also known as dot


Also known as decimal point

•

operator: structure address operator


.264

file extension

Video: H.264/MPEG-4 AVC video data file 

.3g2

file extension

Video: 3GPP2 multimedia data 


.3ga

file extension

Audio: Audio file for wireless networks 

.3gp

file extension

Video: Multimedia files for wireless networks 

.aac

file extension

Audio: Advanced audio coding stream file 


.abr

file extension:

2D graphics: Adobe Photoshop brush 


.ai

file extension:

Vector graphics: Adobe Illustrator graphics 

.aif

file extension

Audio: Audio Interchange File Format 

.aiff

file extension

Audio: Audio Interchange File Format 

.amr

file extension

Audio: Adaptive Multi-Rate compressed audio 


.ani

file extension:

2D graphics: Animated cursor 

.ape

file extension

Audio: Monkey's Audio lossless audio compression format 

.arf

file extension

Audio and Video: WebEx advanced record file

.arj

file extension

Compression: ARJ compressed file


.arw

file extension:

Digital Camera RAW photos: Sony Digital Camera RAW digital image

.asf

file extension

Audio and Video: Advanced Systems (streaming) format 

.asm

file extension

PC-DOS: assembler source file

.asx

file extension

Audio and Video: Microsoft Advanced Streaming Redirector 

.avi

file extension

Video: Audio Video Interleave movie 

.bak

file extension

PC-DOS: backup files created by EDLIN

.bas

file extension

PC-DOS: BASIC program source file

.bat

file extension

PC-DOS: batch file

.bik

file extension

Video: BINK video 

.bin


file extension

Disc: Binary disc image

PC-DOS: binary image file


.bmp

file extension

Bitmap: Standard Windows bitmap image 

.cda

file extension

Audio: CD Audio track file 

.cdr

file extension:

Vector graphics: CorelDRAW vector or bitmap graphics 

.cdt

file extension:

2D graphics: CorelDRAW template 

.com

file extension

PC-DOS: command file

.cpt

file extension

Bitmap: Corel PHOTO-PAINT bitmap image

.cr2

file extension:

Digital Camera RAW photos: Canon digital camera RAW image format version 2.0 


.crf

file extension

PC-DOS: cross reference source file

.crw

file extension:

Digital Camera RAW photos: Canon digital camera RAW image format 

.csh

file extension:

Vector graphics: Adobe Photoshop custom shape 

.csl

file extension:

Vector graphics: CorelDRAW symbol library 

.CSV

file extension

Database: Comma separated value file

.dash

file extension

Video: Dynamic Adaptive Streaming over HTTP video

.dat

file extension

Data: Data file

.dat

file extension

Video: Video CD MPEG movie MPEG1

.db

file extension

Database: Database file

.dbf

file extension

Database: Database file


.dcr

file extension:

Digital Camera RAW photos: Kodak Digital Camera Raw Image Format 

.dds

file extension

Bitmap: DirectDraw surface data 

.deb

file extension

Compression: Debian software package file

.dib

file extension

Bitmap: Device-Independent bitmap graphics 

.djvu

file extension:

2D graphics: DjVu image 

.dmg

file extension

Disc: macOS X disk image


.dng

file extension

Bitmap and Digital Camera RAW photos: Adobe Digital Negative

.drw

file extension:

Vector graphics: Vector drawing 

.dvf

file extension

Audio: Sony DV voice data

.dvr

file extension

Video: Microsoft Windows XP Media Center TV recording 


.email

file extension

E-mail: Outlook Express e-mail message file

.emf

file extension

Bitmap: Enhanced Windows Metafile picture 

.eml

file extension

E-mail: e-mail message file from multiple e-mail clients

.emix

file extension

E-mail: Apple Mail e-mail file


.emz

file extension:

Vector graphics: Microsoft Windows compressed enhanced metafile

.eps

file extension:

2D graphics: Encapsulated PostScript image 

.exe

file extension

PC-DOS: executable file, created by linker

.fla

file extension:

2D graphics: Editable Adobe Flash project (animation, movie, flash application) 

.flac

file extension

Audio: Audio files encoded by Flac - free lossless audio codec 

.flv

file extension

Video: Flash video 

.fpx

file extension:

Digital Camera RAW photos: Kodak FlashPiX bitmap image 

.gif

file extension

Bitmap: Graphics interchange file format 🇬🇧

.gp

file extension

Audio: Guitar Pro 7 project

.gp3

file extension

Audio: Guitar Pro 3 project

.gp4

file extension

Audio: Guitar Pro 4 project 🇬🇧

.gp5

file extension

Audio: Guitar Pro 5 project 🇬🇧

.gpt

file extension

Audio: Guitar Pro 1 project


.gpx

file extension

Audio: Guitar Pro 6 project

.h264

file extension

Video: H.264 video 

.heic

file extension

Bitmap: High Efficiency Image Format

.hex

file extension

PC-DOS: hex ASCII file which DEBUG converts to binary and loads

.HTM

file extension

Websites: HyperText Markup Language


.HTML

file extension

Websites: HyperText Markup Language

.icns

file extension:

2D graphics: Apple icon graphic format 


.ico

file extension

Bitmap: Icon image 

.icon

file extension

Bitmap: Icon image file 


.iso

file extension

Disc: ISO disc image

.jpeg

file extension

Image: Joint Photographic Experts Group bitmap image 

.jpg

file extension

Image: Joint Photographic Experts Group bitmap image 

.lib

file extension

PC-DOS: source code library file

.logic

file extension

Audio: Apple Logic Pro music project 


.lst

file extension

PC-DOS: listing file made by assembler

.m2t

file extension

Video: MPEG-2 transport stream 

.m2ts

file extension

Video: MPEG-2 stream (Blu-Ray)



.m4a

file extension

Audio: MPEG-4 compressed audio



.m4b

file extension

Audio: MPEG-4 Audio Layer audio book



.m4p

file extension

Audio: Apple iTunes Music Store audio



.m4v

file extension

Video: MPEG-4 video file format



.map

file extension

PC-DOS: linker's map

.mdb

file extension

Database: Microsoft Access database file

.mdi

file extension:

2D graphics: Microsoft Office Document Imaging file format 

.mid

file extension

Audio: MIDI audio file

.midi

file extension

Audio: MIDI audio file

.mkv

file extension

Video: Matroska multimedia container video file 


.mov

file extension

Video: Apple QuickTime digital video 


.mp3

file extension

Audio: MP3 compressed audio file (audio, music, or ringtones) 

.mp4

file extension

Video: MPEG-4 video file format 

.mpa

file extension

Audio: MPEG-2 audio file


.mpeg

file extension

Video: MPEG movie 


.mpg

file extension

Video: MPEG 1 video file format 

.mrw

file extension:

Digital Camera RAW photos: Minolta Dimage RAW image 

.msg

file extension

E-mail: Microsoft Outlook e-mail message file

.mts

file extension

Video: AVCHD MPEG-2 transport stream 

.nef

file extension:

Digital Camera RAW photos: Nikon Digital SLR camera RAW image 

.obj

file extension

PC-DOS: assembled object file

.odg

file extension:

2D graphics: OpenDocument drawing 

.ods

file extension

Spreadsheet: Openoffice spreadsheet file

.odt

file extension

Word Processing: Openoffice text document


.oft

file extension

E-mail: Microsoft Outlook e-mail template file

.ogg

file extension

Audio: Ogg Vorbis audio file 

.ogv

file extension

Video: Ogg Vorbis video 

.opus

file extension

Audio: Opus audio data

.orf

file extension:

Digital Camera RAW photos: Olympus Digital camera raw image 


.ost

file extension

E-mail: Microsoft Outlook offline e-mail storage file

.pcd

file extension:

Digital Camera RAW photos: Kodak Picture CD multiresolution image 


.pcm

file extension

Audio: PCM audio data file

.pcx

file extension

Bitmap: Paintbrush bitmap image 

.pdf

file extension

Text: Adobe Portable Document File

.pic

file extension

Bitmap and Vector graphics: Picture image

.pkg

file extension

Compression: Package file

.png

file extension

Bitmap: Portable Network Graphic file 

.ppt

file extension

Presentation: Microsoft PowerPoint file


.pptx

file extension

Presentation: Microsoft PowerPoint file (more recent than the older .ppt)

.prproj

file extension

Video: Adobe Premiere Pro project 

.psb

file extension:

2D graphics: Adobe Photoshop Large Document Format 

.psd

file extension

Bitmap: Adobe Photoshop graphics 

.psdx

file extension

Bitmap: Adobe Photoshop Touch graphics

.pst

file extension

E-mail: Microsoft Outlook e-mail storage file

.ptx

file extension:

Digital Camera RAW photos: Pentax RAW bitmap graphic file

.pzl

file extension:

2D graphics: Puzzle picture image 🧩

.raf

file extension:

Digital Camera RAW photos: Fuji CCD-RAW graphic image 📄

.rar

file extension

Compression: RAR file

.raw

file extension

Bitmap and Digital Camera RAW photos: Digital camera photo RAW image format

.rec

file extension

Audio and Video: Recorded data

.ref

file extension

PC-DOS: cross reference listing file


.rel

file extension

PC-DOS: relocatable file from assembler

.rmvb

file extension

Video: RealMedia variable bitrate 

.rpm

file extension

Compression: red Hat Package Manager

.rw2

file extension:

Digital Camera RAW photos: Panasonic Lumix RAW image

.sav

file extension

Data: Save file (especially a game save file)

.sda

file extension:

Vector graphics: Apache OpenOffice (OpenOffice.org) drawing 

.snd

file extension

Audio: Sound data

.sng

file extension

Audio: song file

.sql

file extension

Database: SQL database file

.sup

file extension:

3D graphics: 3D Subtitle format

.svg

file extension:

Vector graphics: XML based scalable vector graphics format 

.svgz

file extension:

Vector graphics: Compressed SVG (Scalable Vector Graphics)

.swf

file extension

Video and Vector graphics: ShockWave Flash, Animated vector format for the Internet 

.tar

file extension

Dat: Unix or Linux tarball file archive

.tar.gz

file extension

Compression: Tarball compressed file

.tga

file extension

Bitmap: Truevision TarGA bitmap image 

.thm

file extension

Bitmap: Thumbnail bitmap image

.tif

file extension

Bitmap: Aldus Tagged Image File Format (TIFF) bitmap image 

.tiff

file extension

Bitmap: Aldus Tagged Image File Format (TIFF) bitmap image 

.toast

file extension

Disc: Toast disc image

.tod

file extension

Video: Hard disk camera movie MPEG-2 transport stream 

.tmp

file extension

PC-DOS: temporary file

.tp

file extension

Video: MPEG-2 TV recorded video 

.ts

file extension

Video: MPEG-TV recorded video format 


.txt

file extension

Text: plain text file (normally ASCII-only)

.uax

file extension

Audio: Unreal audio package 

.vcd

file extension

Disc: Virtual CD

.vcf

file extension

E-mail: e-mail contact file

.vob

file extension

Video: DVD video object 


.vsdx

file extension:

2D graphics: Microsoft Visio drawing

.wav

file extension

Audio: WAVe PCM Sound, the standard Windows sound format 

.wbmp

file extension

Bitmap: Wireless Bitmap image 

.wdp

file extension

Bitmap: Windows Media HD Photo picture image

.webm

file extension

Video: Matroska WebM video 


.webp

file extension

Bitmap: Google image file format

.wimp

file extension

Video: Microsoft Windows Live Movie Maker video project 

.wma

file extension

Audio: Windows Media Audio file 

See:  **.wmf** — file extension

.wmv

file extension

Video: Windows Media Video 

.wpl

file extension

Audio: Windows Media Player playlist

.xls

file extension

Numerics: Microsoft Excel file

.xlsx

file extension

Spreadsheet: Microsoft Excel file (more modern than the older .xls)


.xml

file extension

Data: XML file

.xmp

file extension:

2D graphics: Adobe Extensible Metadata Platform data 

.Z

file extension

Compression: Z compressed file

.zap

file extension

Audio: Zipped audio book

.zip

file extension

Compression: Zip compressed file

.\$\$\$

file extension

PC-DOS: EDLIN or other temporary file

:

colon

:

ASCII: 3A hex

UNICODE: COLON

;

semicolon

;

ASCII: 3B hex

UNICODE: SEMICOLON

?

question mark

?

ASCII: 3F hex

UNICODE: QUESTION MARK



at sign

@

ASCII: 40 hex

UNICODE: COMMERICAL AT

Also known as the at sign

@catch()

keyword: Objective-C word

@class

keyword: Objective-C word

@dynamic

keyword: Objective-C word

@end

keyword: Objective-C word

@finally

keyword: Objective-C word

@implementation

keyword: Objective-C word

@interface

keyword: Objective-C word

@private

keyword: Objective-C word

@property

keyword: Objective-C word

@protected

keyword: Objective-C word

@protocol

keyword: Objective-C word

@public

keyword: Objective-C word

@select

keyword: Objective-C word

@synthesize

keyword: Objective-C word

@throw

keyword: Objective-C word

@try

keyword: Objective-C word

[

left square bracket

[

ASCII: 5B hex

UNICODE: LEFT SQUARE BRACKET

Also known as opening square bracket

[]

operator: array operator

\

backslash

\

ASCII: 5C hex

UNICODE: REVERSE SOLIDUS

Also known as escape character

]

right square
bracket

]

ASCII: 5D hex

UNICODE: RIGHT SQUARE BRACKET

Also known as closing square bracket



circumflex accent

^

ASCII: 5E hex (originally [1963] ↑)

UNICODE: CIRCUMFLEX ACCENT

^

operator: bitwise exclusive OR operator

^=

operator: bitwise exclusive OR assignment operator

~ underscore

—

ASCII: 5F hex (originally [1963] ←)

UNICODE: LOW LINE

_Bool

keyword: Objective-C reserved word

CLASS

keyword: PHP reserved word

_Complex

keyword: Objective-C reserved word

`_DIR_`

keyword: PHP reserved word

`_ENCODING_`

keyword: `_ENCODING_` (all caps) Ruby reserved word

`_exit`

function: C library function: stands for program EXIT

`_FILE_`

keyword: PHP compile-time constant

keyword: `_FILE_` (all caps) Ruby reserved word

`_FUNCTION_`

keyword: PHP compile-time constant

`__halt_compiler()`

keyword: PHP reserved word

`_Imaginary`

keyword: Objective-C reserved word

`_LINE_`

keyword: PHP compile-time constant

keyword: `_LINE_` (all caps) Ruby reserved word

`_METHOD_`

keyword: PHP compile-time constant

`_NAMESPACE_`

keyword: PHP compile-time constant

`_TRAIT_`

keyword: PHP compile-time constant

grave accent

,

ASCII: 60 hex

UNICODE: GRAVE ACCENT

Also known as backtick

{

left curly bracket

{

ASCII: 7B hex

UNICODE: LEFT CURLY BRACKET

Also known as open curly bracket

Also known as left brace

|

vertical line

|

ASCII: 7C hex

UNICODE: VERTICAL LINE (originally [1963] ACK [acknowledge], then [1965] ¬)

Also known as vertical bar

Also known as pipe

|

operator: bitwise inclusive OR operator

||

operator: logical inclusive OR operator

|=

operator: bitwise inclusive OR assignment operator

}

right curly bracket

}

ASCII: 7D hex (originally [1963] ESC [escape], then [1965] |)

UNICODE: RIGHT CURLY BRACKET

Also known as closing curly bracket

Also known as right brace

~

tilde

~

ASCII: 7E hex

UNICODE: TILDE

~

operator: one's complement operator

μ

micro

μ

UNICODE: 00B5 MICRO SIGN

μ-velOSity

operating system

Proprietary OS by Green Hills Software

A lightweight microkernel. — [Wikipedia: List of operating systems](#)



Greek alphabet

Greek alpha Α α
Greek beta Β β
gamma Γ γ
delta Δ δ
epsilon Ε ε
zeta Ζ ζ
eta Η η
theta Θ θ ϑ
iota Ι ι
kappa Κ κ
lam(b)da Λ λ
mu Μ μ
nu Ν ν

xi Ξ ξ
omicron O o
pi Π π \wp
rho P ρ
sigma Σ σ ς
tau T τ
upsilon Y υ Υ
phi Φ ϕ
chi X χ
psi Ψ ψ
omega Ω ω

alpha
Α α

Alpha Α

Greek letter

UNICODE: 0391 GREEK CAPITAL LETTER ALPHA

apha α

Greek letter

UNICODE: 03B1 GREEK SMALL LETTER ALPHA

Greek alphabet

beta

B β

Beta B

Greek letter

UNICODE: 0392 GREEK CAPITAL LETTER BETA

beta β

Greek letter

UNICODE: 03B2 GREEK SMALL LETTER BETA

Greek alphabet

gamma

Γ γ

Gamma Γ

Greek letter

UNICODE: 0393 GREEK CAPITAL LETTER GAMMA

gamma γ

Greek letter

UNICODE: 03B3 GREEK SMALL LETTER GAMMA

Greek alphabet

delta

Δ δ

Delta Δ

Greek letter

UNICODE: 0394 GREEK CAPITAL LETTER DELTA

delta δ

Greek letter

UNICODE: 03B4 GREEK SMALL LETTER DELTA

Greek alphabet

εῖς

Ε ε

Epsilon Ε

Greek letter

UNICODE: 0395 GREEK CAPITAL LETTER EPSILON

epsilon ε

Greek letter

UNICODE: 03B5 GREEK SMALL LETTER EPSILON

Greek alphabet

zeta

Ζ ζ

Zeta Ζ

Greek letter

UNICODE: 0396 GREEK CAPITAL LETTER ZETA

zeta ζ

Greek letter

UNICODE: 03B6 GREEK SMALL LETTER ZETA

Greek alphabet

eta

Η η

Eta Η

Greek letter

UNICODE: 0397 GREEK CAPITAL LETTER ETA

eta η

Greek letter

UNICODE: 03B7 GREEK SMALL LETTER ETA

Greek alphabet

theta

Θ θ ϑ

Theta Θ

Greek letter

UNICODE: 0398 GREEK CAPITAL LETTER THETA

theta θ

Greek letter

UNICODE: 03B8 GREEK SMALL LETTER THETA

symbol theta ϑ

Greek letter

UNICODE: 03D1 GREEK THETA SYMBOL

Greek alphabet

íota

I ι

Iota I

Greek letter

UNICODE: 0399 GREEK CAPITAL LETTER IOTA

iota ι

Greek letter

UNICODE: 03B9 GREEK SMALL LETTER IOTA

Greek alphabet

kappa

K κ

Kappa K

Greek letter

UNICODE: 039A GREEK CAPITAL LETTER KAPPA

kappa κ

Greek letter

UNICODE: 03BA GREEK SMALL LETTER KAPPA

Greek alphabet

lam(b)da

Λ λ

Lambda Λ

Greek letter

UNICODE: 039B GREEK CAPITAL LETTER LAMDA

lambda λ

Greek letter

UNICODE: 03BB GREEK SMALL LETTER LAMDA

Greek alphabet

mu

Μ μ

Mu Μ

Greek letter

UNICODE: 039C GREEK CAPITAL LETTER MU

mu μ

Greek letter

UNICODE: 03BC GREEK SMALL LETTER MU

Greek alphabet

nu

N v

Nu N

Greek letter

UNICODE: 039D GREEK CAPITAL LETTER NU

nu v

Greek letter

UNICODE: 03BD GREEK SMALL LETTER NU

Greek alphabet

ξί

Ξ ξ

Xi Ξ

Greek letter

UNICODE: 039E GREEK CAPITAL LETTER XI

xi ξ

Greek letter

UNICODE: 03BE GREEK SMALL LETTER XI

Greek alphabet

omícron

O o

Omicron O

Greek letter

UNICODE: 039F GREEK CAPITAL LETTER OMICRON

omicron o

Greek letter

UNICODE: 03BF GREEK SMALL LETTER OMICRON

Greek alphabet

πί
Π π ω

Π Π

Greek letter

UNICODE: 03A0 GREEK CAPITAL LETTER PI

π π

Greek letter

UNICODE: 03C0 GREEK SMALL LETTER PI

symbol π ω

Greek letter

UNICODE: Greek Small Letter Pi

Greek alphabet

rho

Ρ ϱ

Rho Ρ

Greek letter

UNICODE: 03A1 GREEK CAPITAL LETTER RHO

rho ϱ

Greek letter

UNICODE: 03C1 GREEK SMALL LETTER RHO

Greek alphabet

sigma
Σ σ ς

Sigma Σ

Greek letter

UNICODE: 03A3 GREEK CAPITAL LETTER SIGMA

sigma σ

Greek letter

UNICODE: 03C3 GREEK SMALL LETTER SIGMA

final sigma ς

Greek letter

UNICODE: 03C2 GREEK SMALL LETTER FINAL SIGMA

Greek alphabet

tau

T τ

Tau T

Greek letter

UNICODE: 03A4 GREEK CAPITAL LETTER TAU

tau τ

Greek letter

UNICODE: 03C4 GREEK SMALL LETTER TAU

Greek alphabet

upsilon
Υ υ Υ

Upsilon Υ

Greek letter

UNICODE: 03A5 GREEK CAPITAL LETTER UPSILON

upsilon υ

Greek letter

UNICODE: 03C5 GREEK SMALL LETTER UPSILON

symbol upsilon Υ

Greek letter

UNICODE: 03D2 GREEK UPSILON WITH HOOK SYMBOL

Greek alphabet

phí
Φ φ

Phi Φ

Greek letter

UNICODE: 03A6 GREEK CAPITAL LETTER PHI

phi φ

Greek letter

UNICODE: 03C6 GREEK SMALL LETTER PHI

Greek alphabet

chí

X χ

Chi X

Greek letter

UNICODE: 03A7 GREEK CAPITAL LETTER CHI

chi χ

Greek letter

UNICODE: 03C7 GREEK SMALL LETTER CHI

Greek alphabet

psí
Ψ ψ

Psi Ψ

Greek letter

UNICODE: 03A8 GREEK CAPITAL LETTER PSI

psi ψ

Greek letter

UNICODE: 03C8 GREEK SMALL LETTER PSI

Greek alphabet

omega

Ω ω

Omega Ω

Greek letter

UNICODE: 03A9 GREEK CAPITAL LETTER OMEGA

omega ω

Greek letter

UNICODE: 03C9 GREEK SMALL LETTER OMEGA

Greek alphabet

Ada

lexicon

keywords

abort
abs
abstract
accept
access
aliased
all
and
array
at
begin
body

case
constant
declare
delay
delta
digits
do
else
elsif
end
entry
exception
exit
for
function
generic
goto
if
in
interface
is
limited

mod
new
not
null
of
or
others
out
overriding
package
pragma
private
procedure
protected
raise
range
record
rem
renames
requeue
return
reverse

select
seperate
subtype
synchronized
tagged
task
terminate
then
type
until
use
when
while
with
xor
+
-
*
/

COBOL

lexicon

COBOL reserved keywords

accept
access
add
address
advancing
after
all
alphabet
alphabetic
alphabetic-lower
alphabetic-upper
alphanumeric

alphanumeric-edited
also
alter
alternate
and
any
apply
are
area
areas
ascending
assign
at
author
basis
before
beginning
binary
blank
block
bottom
by

cancel
case
cbl
cd
cf
ch
character
characters
class
class-id
clock-units
close
cobol
code
code-set
collating
column
com-reg
comma
common
communication
comp

comp-1
comp-2
comp-3
comp-4
comp-5
computational
computational-1
computational-2
computational-3
computational-4
computational-5
compute
configuration
contains
content
control
controls
converting
copy
corr
corresponding
count

currency
cursor
data
date-compiled
date-written
day
day-of-week
dbcs
de
debug-contents
debug-item
debug-line
debug-name
debug-sub-1
debug-sub-2
debug-sub-3
debugging
decimal-point
declaratives
delete
delimited
delimiter

depending
descending
destination
detail
display
display-1
divide
division
down
duplicates
dynamic
egcs
egi
eject
else
emi
enable
end
end-add
end-call
end-compute
end-delete

end-divide
end-evaluate
end-if
end-invoke
end-multiply
endofdata
end-of-page
end-perform
end-read
end-receive
end-return
end-rewrite
end-search
end-start
end-string
end-subtract
end-unstring
end-write
ending
enter
entry

environment
eop
equal
error
esi
evaluate
every
exception
exit
extend
external
false
fd
file
file-control
filler
final
first
footing
for
from
function

generate
giving
global
go
goback
greater
group
heading
high-value
high-values
id
identification
if
in
index
indexed
indicate
inherits
initial
initialize
initiate
input

input-output
insert
inspect
installation
into
invalid
invoke
i-o
i-o-control
is
just
justified
kanji
key
label
last
leading
left
length
less
limit
limits

linage
linage-counter
line
line-counter
lines
linkage
local-storage
lock
low-value
low-values
memory
merge
message
metaclass
method
method-id
mode
modules
more-labels
move
multiple
multiply

native
native-binary
negative
next
no
not
null
nulls
number
numeric
numeric-edited
object
object-computer
occurs
of
off
omitted
on
open
optional
or
order

organization
other
output
overflow
override
packed-decimal
padding
page
page-counter
password
perform
pf
ph
pic
picture
plus
pointer
position
positive
printing
procedure

procedure-pointer
procedures
proceed
processing
program
program-id
purge
queue
quote
quotes
random
rd
read
ready
receive
record
recording
records
recursive
redefines
reel
reference

references
relative
release
reload
rem
remainder
removal
renames
replace
replacing
report
reporting
reports
repository
rerun
reserve
reset
return
return-code
returning
reversed
rewind

rewrite
rf
rh
right
rounded
run
same
sd
search
section
security
segment
segment-limit
select
self
send
sentence
seperate
sequence
sequential
service
set

shift-in
shift-out
sign
size
skip1
skip2
skip3
sort
sort-control
sort-core-size
sort-file-size
sort-merge
sort-message
sort-mode-size
sort-return
source
source-computer
space
spaces
special-names
standard
standard-1

standard-2
start
status
stop
string
sub-queue-1
sub-queue-2
sub-queue-3
subtract
sum
super
suppress
symbolic
sync
synchronized
table
tally
tallying
tape
terminal
terminate
test

text
than
then
through
thru
time
times
title
to
top
trace
trailing
true
type
unit
unstring
until
up
upon
usage
use

using
value
values
varying
when
when-compiled
with
words
working-storage
write
write-only
zero
zeroes
zeros

FORTRAN

lexicon

FORTRAN reserved keywords

Portions of this document are provided here. Use the link to view and read the entire document.

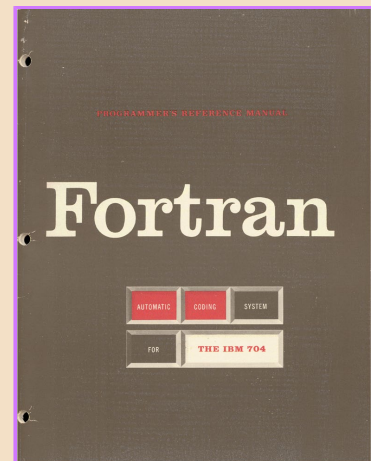
NOTE: This document was released almost a year *before* the language was released.

From the [IBM Programmer's Reference Manual FORTRAN Automatic Coding System for the IBM 704](#):

THE FORTRAN SYSTEM

The IBM Mathematical Formula Translating System
FORTRAN is an automatic coding system for the IBM 704 EDPM. More precisely, it is a 704 program which accepts a source program written in a language — the FORTRAN language — closely resembling the ordinary language of mathematics, and which produces an object program in 704 machine language, ready to be run on a 704.

FORTRAN therefore in effect transforms the 704 into a machine with which communication can be made in a language more concise and more familiar than the 704 language itself. The result should be a considerable reduction in the training required to program, as well as in the time consumed in writing programs and eliminating their errors.



Among the features which characterize the FORTRAN system are the following:

Size of Machine Required

The system has been designed to operate on a "small" 704, but to write object programs for any 704. (For further details, see the section on Source and Object Machines in Chapter 7.) If an object program is produced which is too large for the machine on which it is to be run, the programmer must subdivide the program.

Efficiency of the Object Program

Object programs produced by FORTRAN will nearly as efficient as those written by good programmers.

Scope of Applicability

The FORTRAN language is intended to be capable of expressing any problem of numerical computation. In particular, it deals easily with problems containing large sets of formulae and many variables, and it permits any variable to have up to three independent subscripts.

However, for problems in which machine words have a logical rather than a numerical meaning it is less satisfactory, and it may fail entirely to express some such problems. Nevertheless, many logical operations not directly expressible in the FORTRAN language can be obtained by making use of the provisions for incorporating library routines.

Inclusion of Library Routines

Pre-written routines to evaluate any single-valued functions of any number of arguments can be made available for incorporation into object programs by placing them on the master FORTRAN tape.

Provisions for Input and Output

Certain statements in the FORTRAN language cause the object program to be equipped with its necessary input and output programs. Those which deal with decimal information include conversion to or from binary, and permit considerable freedom of format in the external medium.

Nature of Fortran Arithmetic

Arithmetic in the object program will generally be performed with single-precision 704 floating point numbers. These numbers provide 27 binary digits (about 8

decimal digits) of precision, and may have magnitudes between approximately 10^{-38} and 10^{38} , and zero. Fixed point arithmetic, but for integers only, is also provided.

CHAPTER 1. GENERAL PROPERTIES OF A FORTRAN SOURCE PROGRAM

A FORTRAN source program consists of a sequence of FORTRAN *statements*. There are 32 different types of statements, which are described in detail in the chapters which follow.

Keypunching the Program

Each statement is punched on a separate card. If a statement is too long to fit on a single card it can be continued over as many as 9 additional *continuation* cards. For each statement the initial card must contain either a zero or blank in column 6; on continuation cards column 6 must not contain a zero or blank, and it should be used to number the continuation cards consecutively from 1 to 9.

If a statement is too long to fit on a single line of the coding form, the programmer can signal to the keypuncher that he has continued on to the next line by placing a mark in the column labeled CONTINUATION.

The order of the statements is governed solely by the order of the cards. However, any number less than 2^{15} (=32768) may be associated with any statement by punching it in columns 1-5 of the initial card bearing that statement. Thereupon this number becomes the *statement number* of that statement. Statement numbers, besides permitting cross-references within the source code, also help the programmer to correlate the object program with his source code.

Punching the character C in column 1 will cause the card to be ignored by FORTRAN. Such cards may therefore be used to carry comments which will appear when the deck is listed.

Columns 73-80 are not read by FORTRAN and may be punched with any desired identifying information.

The statements themselves are punched in columns 7-72, both on initial and continuation cards. Thus a statement consists of not more than $10 \times 66 = 660$ characters. A table of the admissible characters in FORTRAN is given in Appendix A.

Blank characters, except in column 6, are simply ignored by FORTRAN, and the programmer may use blanks freely to improve the readability of his FORTRAN

listing.

Preview of the Fortran Statements

The 32 types of statement, of which every FORTRAN program is composed, may be classified as follows:

1. The *arithmetic formula*, which causes the object program to carry out a numerical computation. Chapter 2 discusses the symbols available for referring to constants and variables, and Chapter 3 the combining of these into arithmetic formulas.
2. The 15 *control statments*, which govern the flow of control in the object program. These are discussed in Chapter 4.
3. The 13 *input-output statements*, which provide the object program wiht its necessary input and putput routines. These are discussed in Chapter 5.
4. Finally, the 3 *specification statements*, which provide various information required or desirable to make the object program efficient, are discussed in Chapter 6.

Chapters 7 and 8, which conclude the manual, give additional detail on various topics and examples of FORTRAN programming.

Java

lexicon

keywords

abstract
assert
boolean
break
byte
case
catch
char
class
const
continue
default

do
double
else
enum
extends
final
finally
float
for
goto
if
implement
imports
instanceof
int
interface
long
native
new
package
private
protected

public
return
short
static
strictfp
super
switch
synchronized
this
throw
throws
transient
try
void
volatile
while

reserved words for literal values

false
null
true

JavaScript

lexicon

JavaScript reserved keywords

abstract
arguments
boolean
break
byte
case
catch
char
class
const
continue
debugger

default
delete
do
double
else
enum
eval
export
extends
false
final
finally
float
for
function
goto
if
implements
import
in
instanceof
int

interface
let
long
native
new
null
package
private
protected
public
return
short
static
super
switch
synchronized
this
throw
throws
transient
true
try

typeof
var
void
volatile
while
with
yield

JavaScript Objects, Properties, and Methods

Array
Date
eval
function
hasOwnProperty
Infinity
isFinite
isNaN
isPrototypeOf
length
Math
name
NaN

Number
prototype
String
toString
undefined
valueOf

JavaScript Windows objects and properties reserved words

alert
all
anchor
anchors
area
assign
blur
button
checkbox
clearInterval
clearTimeout
clientInformation
close
closed

confirm
constructor
Crypto
decodeURI
decodeURIComponent
defaultStatus
Document
Element
Embed
embeds
encodeURIComponent
encodeURIComponent
escape
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restrict
retain
return
short
signed
sizeof
static
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typedef
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_Imaginary

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BOOL
bycopy
byref
Class
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IMP
in
inout
nil
NO
NULL
oneway
out
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Super
YES
@catch()
@class
@dynamic
@end
@finally
@implementation
@interface
@private
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@protocol
@public
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@synthesize
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PHP

lexicon

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endwhile
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extends
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for
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isset()
list()
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or
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PL/I

lexicon

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BASED

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BIN(x[,p[,q]])
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CHAR
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DCL
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DECIMAL
DECIMAL (function)
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%DO
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character_length
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hour
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"in
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inner

insert
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integer
intersect
interval
into
is
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join
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leading
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lesseq
level
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lock
long
loop
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maxextents
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modify
month
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noaudit
no_cache
nocompress
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noteq

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number
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of
offline
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or
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resource
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downto
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entity
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in
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library
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literal
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map
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not
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Unix and Linux System Administration and Shell Programming

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This section needs repair. I have the last PDF created, but my source files were stolen. Unfortunately, Adobe Acrobat does a horrible job of converting a PDF back into HTML (the source I use to create the book you are looking at now). It will take substantial time to repair these chapters.

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Unix and Linux System Administration and Shell Programming

chapter 0

This guide looks at Unix (and Linux) shell programming and system administration.

This guide covers the basic materials needed for you to understand how to administer your own Linux or Unix server, as well as how to run your own personal desktop version of Linux or Mac OS X.

This guide goes beyond the typical material in a shell scripting class and presents material related to either downloading and compiling existing software (including ports to new hardware and/or operating systems) or for preparing your own software for release via the internet.

requirements

You need a willingness to learn.

You need a working computer or server or access to one.

The computer needs a working version of Unix, Linux, Mac OS X, AIX, HP/UX, Solaris, etc. (it can be a dual boot computer).

A working connection to the internet is recommended (preferably a high speed connection), but not required.

You may use LAMP on Linux, MAMP on Mac OS X, or WAMP on Windows to set up and experiment with a local web server.

You may want to have a domain name of your own and web hosting to try out controlling a server. You can use any other major hosting providers to obtain these services.

options

Almost anyone can learn this material. It isn't complicated. It really helps if you enjoy doing this kind of thing. You will learn faster and you will enjoy the work. If you don't enjoy this kind of computer activity, please think carefully about whether or not you want to spend decades at a job you hate.

Almost anyone can slog through and learn at least some of this material, but an aptitude for this kind of material greatly helps learning. Mathematical ability is useful, but not necessary.

Many portions of this guide require root or administrator access. While you learn better if you can actually try out each command for yourself, you can just read about root material if you don't have root or administrator access.

Some portions of this guide may require special software. Most of the software can be downloaded for free. The Windows Subsystem for Linux runs on Windows 10 version 2004 and higher (build 19041 and higher) or Windows 11. This is available for free from Microsoft at <https://learn.microsoft.com/en-us/windows/wsl/about>. Those with Mac OS X should have the Developer Tools installed. These are available for free on either the install DVD/CD or from Apple at <https://connect.apple.com/>

A static IP address is in general useful and is required for some portions of this guide.

proletarian

This guide is intentionally proletarian and is specifically intended to allow anyone, regardless of socio-economic position, to have access to the basic information and the power against the established authorities that such knowledge provides.

This subversive intent is consistent with Linux, which was created by a college student who couldn't afford the dominant tools of the time.

This contrasts strongly with Apple's Macintosh, Mac OS X, and iOS, all of which are specifically targeted for sales to the trendiest members of the wealthy class. Apple does offer a discount to school children, but that discount is smaller than the discount Apple offers to large corporations.

This also contrasts with Microsoft's Windows, which is specifically targeted for

sales to large corporations and their employees.

And this contrasts with Google's Android, which is specifically targeted for businesses. The users of Android products are part of Google's product, not the customer. The customers are businesses who want detailed information on the masses for purposes of advertising.

This guide is intended to make knowledge available to everyone, especially those who are increasingly being shut out of the mainstream education system.

goals

Please note that at the time this paragraph was written, these goals are not yet implemented in the text. Now is a good time to make suggestions on modifications of the goals.

The reader will understand the Unix/Linux computing environment and history.

The reader will be able to access the Unix/Linux system and perform basic operations, including using help features.

The reader will be able to run common command-line tools such as grep, sed, and awk.

The reader will be able to access and manipulate files and directories, including basic and advanced directory and file management. The reader will be able to use file system utilities.

The reader will be able to design and implement file system security. The reader will be able to print documents.

The reader will be able to perform system backups and restores. The reader will be able to troubleshoot system processes.

The reader will be able to perform environment customization.

The reader will become acquainted with networks, web servers, web clients, transaction security, and other basic network concepts.

The reader will be able to run Bash, Zsh, and other UNIX/Linux shell scripts and GNU/Linux command line applications including tools (such as vim, emacs, and tmux).

The reader will be able to run common languages (such as Node.JS, Javascript, Python, Ruby, C/C++, C#, F#, Rust, and Go).

The reader will learn how to create a web page that accepts input, program the server response, and interface the input with a database.

The reader will understand web server functionality and be able to install and configure Apache. The reader will be able to work with, understand, and configure DNS functionality.

The reader will be able to set up and maintain his or her own general purpose server, including hosting, server administration, security, user interactivity, and database integration.

The reader will be familiar with SQL Server architecture and able to efficiently administer and maintain SQL Server instances and databases.

The reader will be able to run common services (such as SSHD, MySQL, Apache, lighttpd, MongoDB, and PostgreSQL).

The reader will be able to install additional software using either a distribution package manager or compile from source code.

The reader will be able to secure a web server and its websites.

personal reference book

I strongly recommend that each reader print out this PDF and the manual pages from your computer and place the resulting pages into a looseleaf binder. That will allow you to organize the chapters in the order that makes the most sense for you. It will also allow you to make notes in the margins. It will allow you to easily add materials from other sources. The resulting binder will be personalized to meet your individual needs.

If you have a limited printing budget (ink is expensive), print out portions of this PDF as needed.

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cool shell tricks for Unix, Mac OS X, and Linux

chapter 1

This chapter looks at cool shell tricks for Unix, Linux, and Mac OS X to give you an idea of the power of the shell.

A quick summary of how to get to the shell is included in this chapter (more detailed explanations, including what to do when things go wrong, are in following chapters.

If you need a primer on computer terminology, please look at the [next chapter](#) on basics of computers.

WARNING: Never trust any Terminal/Shell commands you find on the internet. Only run shell commands you understand. In particular, *never* run anything that includes `sudo` anywhere in the command line unless you are absolutely certain what the command does. When you run a command line with `sudo` you are giving permission to have complete (possibly destructive) control of your computer at the root level. And, yes, this advice applies even to this nerdary. Don't run any commands with `sudo` unless you know for sure what you are doing.

cool shell tricks

This chapter has a handful of cool shell tricks. These are intended to show a beginner that a command line shell can be as fun as any graphic user interface and get across the idea that there is a lot of power in the shell that simply doesn't exist in a standard graphic user interface.

definitions

Unix is one of the ground-breaking operating systems from the early days of computing. Mac OS X is built on top of Unix. Linux is a variation of Unix.

The shell is the command line interface for running Unix (and Mac OS X and Linux) with just typing (no mouse).

operating system The software that provides a computer's basic tasks, such as scheduling tasks, recognizing input from a keyboard, sending output to a display screen or printer, keeping track of files and folders (directories), running applications (programs), and controlling peripherals. Operating systems are explained in more detail for beginners just below.

Unix Unix (or UNIX) is an interactive multi-user multitasking timesharing operating system found on many types of computers. It was invented in 1969 at AT&T's Bell Labs by a team led by Ken Thompson and Dennis Ritchie. Some versions of Unix include: AIX, A/UX, BSD, Debian, FreeBSD, GNU, HP-UX, IRIX, Linux, Mac OS X, MINIX, Mint, NetBSD, NEXTSTEP, OpenBSD, OPENSTEP, OSF, POSIX, Red Hat Enterprise, SCO, Solaris, SunOS, System V, Ubuntu, Ultrix, Version 7, and Xenix.

Linux An open-source version of the Unix operating system.

graphical user interface A graphical user interface (GUI) is a windowing system, with windows, icons, and menus, operated by a mouse, trackball, touch screen, or



other pointing device, used for controlling an operating system and application programs (apps). The Macintosh, Windows, Gnome, and KDE are famous examples of graphical user interfaces.

command line interface A command line interface (CLI or command line user interface CLUI) is a text only interface, operated by a keyboard, used for controlling an operating system and programs.

shell The shell is the command line interface for Unix, Linux, and Mac OS X. In addition to interpreting commands, it is also a programming language.

shell uses

The Unix shell is a very powerful programming language, with access to hundreds of useful tools that are designed to work with each other, and access to the very heart of the operating system (although this is only available to the root or superuser account for security reasons).

Unix (and therefore also Mac OS X and Linux) has more than 200 basic commands (also called tools or utilities) that are distributed with the standard operating system. This collection and the ease with which they work together is the major source of the power of Unix. The vast majority of these standard tools are designed to be used from a command line (the shell).

The shell is most commonly used to control servers. Servers are the computers used to host websites. The most common operating system for the world's web servers is Linux. If you learn shell scripting and system administration, you can run your own server and possibly get a job.

The shell can be used to control a desktop or portable computer. Some tablets and smart phones have a shell. The iPhone actually has a shell, but it can't be accessed without jailbreaking the iPhone.

The shell will often run even when a computer is partly broken. Both Mac OS X and Linux (as well as almost all versions of Unix) can be run in a special single user mode. This starts up the computer or server with just the command line shell running. This can be used to service a computer or server, including both diagnosis and repair.

The shell is extremely useful for programming. Even when a programmer uses a graphical integrated development environment (IDE), the programmer is likely to still heavily use the shell for programming support. Some IDEs even have shell access built-in.

Shell scripts are widely used by system administrators for performing common tasks.

command line interfaces

Before the widespread introduction of graphic user interfaces (GUI), computers were controlled either by punched cards, paper tape, or magnetic tape (a batch system) or a command line interface (CLI) using an interactive terminal (originally, some variation of a teletype machine from the telegraph technology). The earliest computers were controlled by front panel lights and switches or even by directly changing the wiring.

The command line interface on interactive terminals was a major advance. Because of limitations of the early hardware (at a time when a computer's entire memory might be measured in hundreds of bytes), the first CLIs compressed the number of characters, using two or three letter abbreviations for commands and single character switches for options to commands.

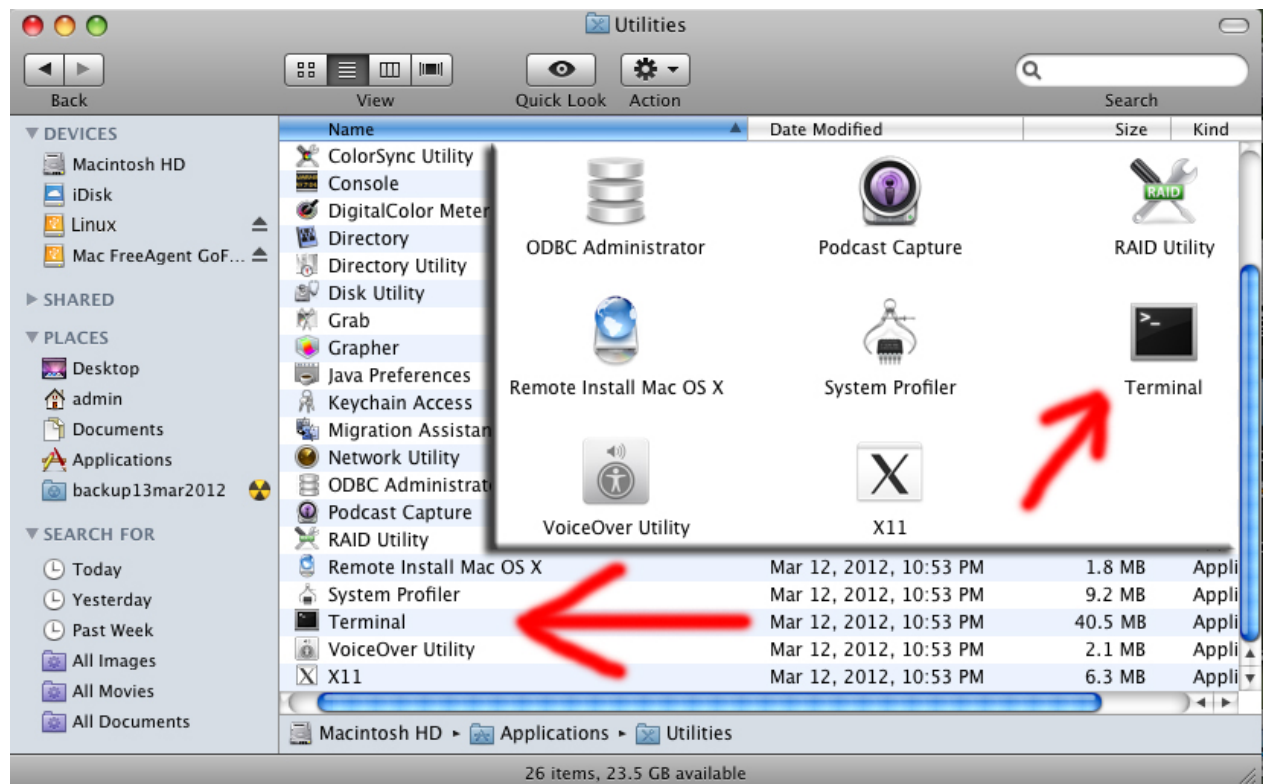
The modern Unix/Linux shells carry over this early limitation because there is the need to remain backward compatible and still run shell scripts that are decades old, but essential to continued operation of legacy systems.

This historical limitation makes it difficult for newcomers to figure out how to use a Unix/Linux shell.

how to find Terminal

You can run these commands by copying and pasting into Terminal, a program that is available for free and preinstalled on Mac OS X and most versions of Linux. Some of these commands will only work on a particular operating system (this will be indicated), but most can be run from Mac OS X, any distribution Linux, and any kind of Unix.

On Mac OS X, you will find Terminal by opening the Applications folder (on your main hard drive), then opening the Utilities folder, then scrolling down the list until you find Terminal or Terminal.app. Drag it to your Dock, because you will be using it a lot.



On Ubuntu Linux, look in Applications menu > Accessories > Terminal. Single click and hold, then drag to your panel, because you will be using it a lot.

On some versions of Linux, you can press the CONTROL and the ALT and the F1 keys all at once to bring up Terminal.

In Gnome, use the Applications menu > Accessories > Terminal or the keyboard shortcut of CONTROL and ALT and T (all at the same time).



In KDE, use the KMenu > System > Terminal Program (Konsole).

In Linux Mint you can use the keyboard shortcut of holding down the CONTROL and ALT and T keys all at once.

As a last resort, you can use the file search feature in Linux or Mac OS X and search for “Terminal”.

warnings

Be careful about any hints you find on the internet. There are people who suggest very destructive commands in the guise of a useful or fun hint just to trick beginners into destroying their computers.

Be very careful if you use any command that includes `sudo`, because it runs at the root level, allowing complete access to the entire computer with all safeguards turned off. Very powerful. Potentially very destructive in a hurry. There are legitimate hints and cool tricks that use `sudo`, but be careful to type them *exactly* as you see them in the hint (or copy and paste) and only use `sudo` hints from trusted sources.

Watch out for anything that includes the command `rm` or `rm *`. That is the remove command versions of it can literally wipe out all of your hard drives in seconds in such a way that only a very expensive data recovery specialist (thousands of dollars) can get your data back.

Also watch out for anything that includes the command `shred`. That is the secure delete and even the most expensive data recovery specialist in the world can't get your

data back.

cool ASCII art

If your computer is connected to the internet, you can use the shell to watch the entire *Star Wars Episode IV* in old fashioned ASCII. Type `telnet towel.blinkenlights.nl` followed by ENTER or RETURN. If you have IPv6, you get extra scenes and color support.

```
$ telnet towel.blinkenlights.nl
```

play a CD

On Linux you can play a CD from the command line. The following example plays the first track of the CD. Change the number to play a different track.

```
$ cdplay play 1
```

On Linux you can get a free coffee cup holder (eject the CD-ROM tray).

```
$ eject
```

basics of computers

chapter 2

summary

This chapter will cover some very basic information on how computers work. I'm not trying to insult anyone's intelligence. This material addresses some of the questions asked by novice test readers.

major desktop systems

There are only three major desktop computing systems left in common existence: Windows, Macintosh, and Linux.

Apple **Macintosh** was the first commercially successful graphical user interface. That is, a computer where one uses a mouse (or other pointing device) and icons, windows, and menus to control the computer. Since the turn of the century, **Mac OS X** has actually been built on top of Unix.

Unix is the last major survivor of the mainframe era (back when computers were so large that they took up an entire room, or even an entire building). Its big advantage of its competitors was that it is available in free open source versions and it runs on an extremely wide variety of computer hardware (including many computers that are no longer used).

Microsoft **Windows** is loosely based on the Macintosh and for decades dominated the personal computer market.

Linux is a very popular open source variation of Unix. It is the most common operating system for servers and the third most popular desktop computing operating system. In its early days it was very geeky and very difficult to use, but it now sports two major graphical user interfaces (Gnome and KDE) and is reasonably easy to use.

FreeBSD is the next most popular open source version of Unix and is commonly used for servers. **Solaris** is the next most popular commercial version of Unix. IBM and HP both have their own commercial versions of Unix.

definitions

Unix is one of the ground-breaking operating systems from the early days of computing. Mac OS X is built on top of Unix. Linux is a variation of Unix.

The shell is the command line interface for running Unix (and Mac OS X and Linux) with just typing (no mouse).

operating system The software that provides a computer's basic tasks, such as scheduling tasks, recognizing input from a keyboard, sending output to a display screen or printer, keeping track of files and folders (directories), running applications (programs), and controlling peripherals. Operating systems are explained in more detail for beginners just below.

Unix (or UNIX) is an interactive multi-user multitasking timesharing operating system found on many types of computers. It was invented in 1969 at AT&T's Bell Labs by a team led by Ken Thompson and Dennis Ritchie. Some versions of Unix include: AIX, A/UX, BSD, Debian, FreeBSD, GNU, HP-UX, IRIX, Linux, Mac OS X, MINIX, Mint, NetBSD, NEXTSTEP, OpenBSD, OPENSTEP, OSF, POSIX, Red Hat Enterprise, SCO, Solaris, SunOS, System V, Ubuntu, Ultrix, Version 7, and Xenix.

Linux An open-source version of the Unix operating system.

graphical user interface A graphical user interface (GUI) is a windowing system, with windows, icons, and menus, operated by a mouse, trackball, touch screen, or other pointing device, used for controlling an operating system and application programs (apps). The Macintosh, Windows, Gnome, and KDE are famous examples of graphical user interfaces.

command line interface A command line interface (CLI or command line user interface CLUI) is a text only interface, operated by a keyboard, used for controlling an operating system and programs.

shell The shell is the command line interface for Unix, Linux, and Mac OS X.

the shell

Unix (and therefore also Mac OS X and Linux) has more than 200 basic commands (also called tools or utilities) that are distributed with the standard operating system. This collection and the ease with which they work together is the major source of the power of Unix. The vast majority of these standard tools are designed to be used from a command line (the shell).

A shell is primarily a command interpreter.

In a graphical user interface such as Macintosh or Windows, the user controls the computer and programs primarily through pointing and clicking, supplemented by some typing.

In a shell, all of the commands are typed. The shell figures out the meaning of what you typed and then has the computer do as instructed.

But the shell is much more than just a command interpreter. It is also a complete programming language.

Because the shell is a complete programming language, with sequences, decisions, loops, and functions, it can do things well beyond pointing and clicking. It can take control of your computer and react to changing circumstances.

Programming languages are used to make all of the computer programs and smart phone apps you've ever seen or used. Your imagination is the only limit on the power of the shell. Anything that can be done with a computer can be done with the shell.

operating systems

The seven layers of software are (top to bottom): Programs; System Utilities; Command Shell; System Services; User Interface; Logical Level; and Hardware Level. A Graphics Engine straddles the bottom three layers. Strictly speaking, only the bottom two levels are the operating system, although even technical persons will often refer to any level other than programs as part of the operating system (and Microsoft tried to convince the Justice Department that their web browser application is actually a part of their operating system).

The following are examples of each category:

- Programs: Examples of Programs include your word processor, spreadsheet, graphics programs, music software, games, etc.
- System Utilities: Examples of System Utilities include file copy, hard drive repair, and

similar items. On the Macintosh, all the Desk Accessories (calculator, key caps, etc.) and all of the Control Panels are examples of System Utilities.

- **Command Shell:** The Command Shell on the Macintosh is the Finder and was the first commercially available graphic command shell. On Windows, the Command Shell is a poorly integrated combination of the File Manager and the Program Manager. The command line (C:\ prompt) of MS-DOS or Bourne Shell of Unix are examples of the older style text-based command shells.
- **System Services:** Examples of System Services are built-in data base query languages on mainframes or the QuickTime media layer of the Macintosh.
- **User Interface:** Until the Macintosh introduced Alan Kay's (inventor of the personal computer, graphic user interfaces, object oriented programming, and software agents) ground breaking ideas on human-computer interfaces, operating systems didn't include support for user interfaces (other than simple text-based shells). The Macintosh user interface is called the Macintosh ToolBox and provides the windows, menus, alert boxes, dialog boxes, scroll bars, buttons, controls, and other user interface elements shared by almost all programs.
- **Logical Level of Operating System:** The Logical Level of the operating system provides high level functions, such as file management, internet and networking facilities, etc.
- **Hardware Level of Operating System:** The Hardware Level of the operating system controls the use of physical system resources, such as the memory manager, process manager, disk drivers, etc.
- **Graphics Engine:** The Graphics Engine includes elements at all three of the lowest levels, from physically displaying things on the monitor to providing high level graphics routines such as fonts and animated sprites.



Human users normally interact with the operating system indirectly, through various programs (application and system) and command shells (text, graphic, etc.). The operating system provides programs with services through system programs and Application Program Interfaces (APIs).

basics of computer hardware

A **computer** is a programmable machine (or more precisely, a programmable sequential state machine). There are two basic kinds of computers: analog and digital.

Analog computers are analog devices. That is, they have continuous states rather than discrete numbered states. An analog computer can represent fractional or irrational values exactly, with no round-off. Analog computers are almost never used outside of experimental settings.

A **digital computer** is a programmable clocked sequential state machine. A digital computer uses discrete states. A binary digital computer uses two discrete states, such as positive/negative, high/low, on/off, used to represent the binary digits zero and one.

The French word **ordinateur**, meaning that which puts things in order, is a good description of the most common functionality of computers.

what are computers used for?

Computers are used for a wide variety of purposes.

Data processing is commercial and financial work. This includes such things as billing, shipping and receiving, inventory control, and similar business related functions, as well as the “electronic office”.

Scientific processing is using a computer to support science. This can be as simple as gathering and analyzing raw data and as complex as modelling natural phenomenon (weather and climate models, thermodynamics, nuclear engineering, etc.).

Multimedia includes **content creation** (composing music, performing music, recording music, editing film and video, special effects, animation, illustration, laying out print materials, etc.) and multimedia playback (games, DVDs, instructional materials, etc.).

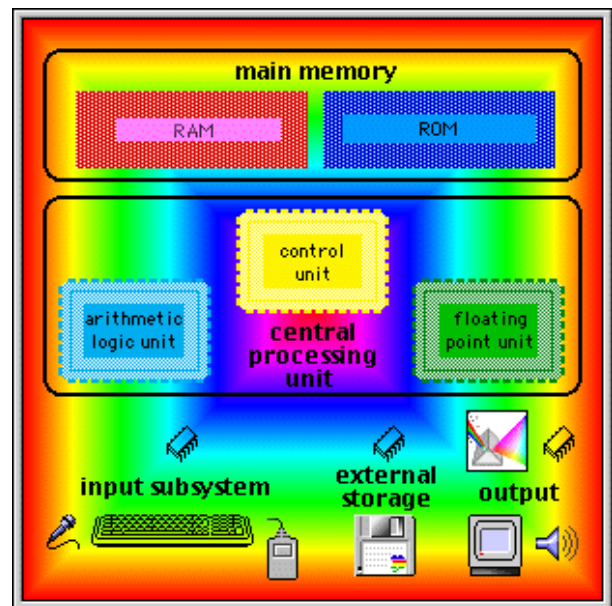
Servers includes web servers. Every website is hosted on a computer called a server. When you connect to a website in your web browser, your computer connects to a web server that provides your web browser with all of the parts (text, pictures, Flash, style sheets, JavaScripts, etc.) needed for your web browser to display any particular web page.

parts of a computer

The classic crude oversimplification of a computer is that it contains three elements: processor unit, memory, and I/O (input/output). The borders between those three terms are highly ambiguous, non-contiguous, and erratically shifting.

A slightly less crude oversimplification divides a computer into five elements: arithmetic and logic subsystem, control subsystem, main storage, input subsystem, and output subsystem.

- processor
- arithmetic and logic
- control
- main storage
- external storage
- input/output overview
- input
- output



processor

The **processor** is the part of the computer that actually does the computations. This is sometimes called an **MPU** (for main processor unit) or **CPU** (for central processing unit or central processor unit).

A processor typically contains an arithmetic/logic unit (**ALU**), control unit (including processor flags, flag register, or status register), internal buses, and sometimes special function units (the most common special function unit being a floating point unit for floating point arithmetic).

Some computers have more than one processor. This is called **multi-processing**.

The major kinds of digital processors are: CISC, RISC, DSP, GPU, and hybrid.

CISC stands for Complex Instruction Set Computer. Mainframe computers and minicomputers were CISC processors, with manufacturers competing to offer the most useful instruction sets. Many of the first two generations of microprocessors were also CISC.

RISC stands for Reduced Instruction Set Computer. RISC came about as a result of academic research that showed that a small well designed instruction set running compiled programs at high speed could perform more computing work than a CISC

running the same programs (although very expensive hand optimized assembly language favored CISC).

DSP stands for Digital Signal Processing. DSP is used primarily in dedicated devices, such as MODEMs, digital cameras, graphics cards, and other specialty devices.

GPU stands for Graphics Processing Unit. GPUs are specialized electronic circuits designed to manipulate and alter memory to accelerate the creation of images in a frame buffer intended for output to a display device.

Hybrid processors combine elements of two or three of the major classes of processors.

arithmetic and logic

An arithmetic/logic unit (**ALU**) performs integer arithmetic and logic operations. It also performs shift and rotate operations and other specialized operations. Usually floating point arithmetic is performed by a dedicated floating point unit (**FPU**), which may be implemented as a co-processor.

An arithmetic/logic unit (**ALU**) performs integer arithmetic and logic operations. It also performs shift and rotate operations and other specialized operations. Usually floating point arithmetic is performed by a dedicated floating point unit (**FPU**), which may be implemented as a co-processor.

control

Control units are in charge of the computer. Control units fetch and decode machine instructions. Control units may also control some external devices.

A **bus** is a set (group) of parallel lines that information (data, addresses, instructions, and other information) travels on inside a computer. Information travels on buses as a series of electrical pulses, each pulse representing a one bit or a zero bit (there are trinary, or three-state, buses, but they are rare). An **internal bus** is a bus inside the processor, moving data, addresses, instructions, and other information between registers and other internal components or units. An **external bus** is a bus outside of the processor (but inside the computer), moving data, addresses, and other information between major components (including cards) inside the computer. Some common kinds of buses are the system bus, a data bus, an address bus, a cache bus, a memory bus, and an I/O bus.

main storage

Main storage is also called **memory** or internal memory (to distinguish from

external memory, such as hard drives).

RAM is Random Access Memory, and is the basic kind of internal memory. RAM is called “random access” because the processor or computer can access *any* location in memory (as contrasted with sequential access devices, which must be accessed in order). RAM has been made from reed relays, transistors, integrated circuits, magnetic core, or anything that can hold and store binary values (one/zero, plus/minus, open/close, positive/negative, high/low, etc.). Most modern RAM is made from integrated circuits. At one time the most common kind of memory in mainframes was magnetic core, so many older programmers will refer to main memory as **core memory** even when the RAM is made from more modern technology. **Static RAM** is called static because it will continue to hold and store information even when power is removed. Magnetic core and reed relays are examples of static memory. **Dynamic RAM** is called dynamic because it loses all data when power is removed. Transistors and integrated circuits are examples of dynamic memory. It is possible to have battery back up for devices that are normally dynamic to turn them into static memory.

ROM is Read Only Memory (it is also random access, but only for reads). ROM is typically used to store things that will never change for the life of the computer, such as low level portions of an operating system. Some processors (or variations within processor families) might have RAM and/or ROM built into the same chip as the processor (normally used for processors used in standalone devices, such as arcade video games, ATMs, microwave ovens, car ignition systems, etc.). **EPROM** is Erasable Programmable Read Only Memory, a special kind of ROM that can be erased and reprogrammed with specialized equipment (but not by the processor it is connected to). EPROMs allow makers of industrial devices (and other similar equipment) to have the benefits of ROM, yet also allow for updating or upgrading the software without having to buy new ROM and throw out the old (the EPROMs are collected, erased and rewritten centrally, then placed back into the machines).

Registers and flags are a special kind of memory that exists inside a processor. Typically a processor will have several internal registers that are much faster than main memory. These registers usually have specialized capabilities for arithmetic, logic, and other operations. Registers are usually fairly small (8, 16, 32, or 64 bits for integer data, address, and control registers; 32, 64, 96, or 128 bits for floating point registers). Some processors separate integer data and address registers, while other processors have general purpose registers that can be used for both data and address purposes. A processor will typically have one to 32 data or general purpose registers (processors with separate data and address registers typically split the register set in half). Many processors have special floating point registers (and some processors have general purpose registers that can be used for either integer or floating point arithmetic). Flags are single bit memory used for testing, comparison, and conditional operations (especially conditional branching).

external storage

External storage (also called **auxillary storage**) is any storage other than main memory. In modern times this is mostly hard drives and removeable media (such as floppy disks, Zip disks, DVDs, CDs, other optical media, etc.). With the advent of USB and FireWire hard drives, the line between permanent hard drives and removeable media is blurred. Other kinds of external storage include tape drives, drum drives, paper tape, and punched cards. Random access or indexed access devices (such as hard drives, removeable media, and drum drives) provide an extension of memory (although usually accessed through logical file systems). Sequential access devices (such as tape drives, paper tape punch/readers, or dumb terminals) provide for off-line storage of large amounts of information (or back ups of data) and are often called I/O devices (for input/output).

input/output overview

Most external devices are capable of both input and output (I/O). Some devices are inherently input-only (also called read-only) or inherently output-only (also called write-only). Regardless of whether a device is I/O, read-only, or write-only, external devices can be classified as block or character devices.

A **character** device is one that inputs or outputs data in a stream of characters, bytes, or bits. Character devices can further be classified as serial or parallel. Examples of character devices include printers, keyboards, and mice.

A **serial** device streams data as a series of bits, moving data one bit at a time. Examples of serial devices include printers and MODEMs.

A **parallel** device streams data in a small group of bits simultaneously. Usually the group is a single eight-bit byte (or possibly seven or nine bits, with the possibility of various control or parity bits included in the data stream). Each group usually corresponds to a single character of data. Rarely there will be a larger group of bits (word, longword, doubleword, etc.). The most common parallel device is a printer (although most modern printers have both a serial and a parallel connection, allowing greater connection flexibility).

A **block** device moves large blocks of data at once. This may be physically implemented as a serial or parallel stream of data, but the entire block gets transferred as single packet of data. Most block devices are random access (that is, information can be read or written from blocks anywhere on the device). Examples of random access block devices include hard disks, floppy disks, and drum drives. Examples of sequential access block devcies include magnetic tape drives and high speed paper tape readers.

input

Input devices are devices that bring information into a computer.

Pure input devices include such things as punched card readers, paper tape readers, keyboards, mice, drawing tablets, touchpads, trackballs, and game controllers.

Devices that have an input component include magnetic tape drives, touchscreens, and dumb terminals.

output

Output devices are devices that bring information out of a computer.

Pure output devices include such things as card punches, paper tape punches, LED displays (for light emitting diodes), monitors, printers, and pen plotters.

Devices that have an output component include magnetic tape drives, combination paper tape reader/punches, teletypes, and dumb terminals.

Unix and Linux

history

chapter 3

summary

This chapter looks at the history of Unix and Linux.

The history can help you understand why things are the way they are in Unix and Linux.

Of particular concern are:

- the small storage space of early computers which resulted in short command names and one character options
- the switchover from teletype I/O to video terminal I/O
- the use of eight bit bytes, ASCII characters, and plain text for interprocess communication
- treating files as collections of bytes and devices, directories, and certain kinds of inter-process communications as files
- the use of small, single-purpose programs that can be easily combined together to perform complex tasks

command line interface

Before the widespread introduction of graphic user interfaces (GUI), computers were controlled either by punched cards, paper tape, or magnetic tape (a batch system) or a command line interface (CLI) using an interactive terminal (originally, some variation of a teletype machine from the telegraph technology). The earliest computers

were controlled by front panel lights and switches or even by directly changing the wiring.

The command line interface on interactive terminals was a major advance. Because of limitations of the early hardware (at a time when a computer's entire memory might be measured in hundreds of bytes), the first CLIs compressed the number of characters, using two or three letter abbreviations for commands and single character switches for options to commands.

The modern Unix/Linux shells carry over this early limitation because there is the need to remain backward compatible and still run shell scripts that are decades old, but essential to continued operation of legacy systems.

This historical limitation makes it difficult for newcomers to figure out how to use a Unix/Linux shell.

Unix history

When Unix came into existence digital computers had been in commercial use for more than a decade.

Mainframe computers were just starting to be replaced by minicomputers. The IBM 360 mainframe computer and clones by other manufacturers was still the dominant computer. The VAX, with its virtual memory addressing, was still in development. Microcomputers were just an experimental idea. The CDC mainframe, a forerunner of the more famous Cray supercomputers, was still the world's fastest computer.

COBOL was the most common programming language for business purposes. **FORTRAN** was the most popular programming language for scientific and systems programming. **PL/I** was a common third language. **ALGOL** was dominate in the academic community.

Most data entry was still performed using punched cards. Directly connected terminals were typically teletypes (TTY), a technology originally developed for telegraph systems. New terminals combining a keyboard and a monitor were still rare. These were also called CRTs (for Cathode Ray Tube) or dumb terminals or smart terminals (depending on the capabilities). Unlike modern black letters on white background terminals (pioneered with the Apple Lisa and Apple Macintosh) and full color monitors (popularized with the Atari and Commodore Amiga personal computers), these monitors were a single color phosphor (usually green) on a dark gray background. Even though disk drives existed, they were expensive and had small capacities. Magnetic tape was still the most commonly used form of storage of large data sets. Minicomputers were making use of punched paper tape.

Interactive computing was still rare.

Bell Telephone Laboratories was still using the BESYS operating system from 1957. In 1964, Bell Labs decided to update their operating system, leading to a 1965 partnership between the Massachusetts Institute of Technology (MIT), AT&T Bell Labs, and General Electric to create an experimental operating system called Multics (MULTIplexed operating and Computing System) for the GE-645 mainframe computer. AT&T intended to offer subscription-based computing services over the phone lines, an idea similar to the modern cloud approach to computing.

While the Multics project had many innovations that went on to become standard approaches for operating systems, the project was too complex for the time.

Bell Labs pulled out of the Multics project in 1969.

Ken Thompson and Dennis Ritchie offered to design a new operating system using a DEC PDP-7 computer that was available at the time.

UNICS (UNIplexed operating and Computing System, a pun on MULTICS) was created at AT&T's Bell Labs in 1969 by a group that included Ken Thompson, Dennis Ritchie, Brian Kernighan, Douglas McIlroy, Michael Lesk, and Joe Ossanna.

This group of researchers, the last of the AT&T employees involved in Multics, decided to attempt the goals of Multics on a much more simple scale.

“What we wanted to preserve was not just a good environment in which to do programming, but a system around which a fellowship could form. We knew from experience that the essence of communal computing, as supplied by remote-access, time-shared machines, is not just to type programs into a terminal instead of a keypunch, but to encourage close communication,” according to Dennis Ritchie.

Unix was originally intended as a programmer's workbench. The original version was a single-user system. As Unix spread through the academic community, more general purpose tools were added, turning Unix into a general purpose operating system.

While Ken Thompson still had access to the Multics environment, he wrote simulations on Multics for Unix's file and paging system.

Ken Thompson ported the Space Travel computer game from Multics to a Digital Equipment Corporation (DEC) PDP-7 he found at Bell Labs.

Ken Thompson and Dennis Ritchie led a team of Bell Labs researchers (the team included Rudd Canaday) working on the PDP-7 to develop a hierarchical file system, computer processes, device files, a command-line interpreter, and a few small utility programs.

Early work was done in a BCPL (Basic Combined Programming Language) a language intended for writing compilers and system software. BCPL was simplified and revised into the B programming language.

By the end of 1969, UNICS had a primitive kernel, an editor, an assembler, a simple shell command interpreter, and a few basic command utilities, including `rm`, `cat`, and `cp`.

The first Unix command shell, called the Thompson shell and abbreviated `sh`, was written by Ken Thompson at AT&T's Bell Labs, was much more simple than the famous Unix shells that came along later. The Thompson shell was distributed with Versions 1 through 6 of Unix, from 1971 to 1975.

In 1970 Dennis Ritchie and Ken Thompson traded the promise to add text processing capabilities to Unix for the use of a Digital Equipment Corporation (DEC) PDP-11/20. The initial version of Unix, a text editor, and a text formatting program called `roff` were all written in PDP-11/20 assembly language.

The PDP-11/20 computer had 24K of RAM. The operating system used 12K. The remaining 12K was split between application programs and a RAM disk. The file size limit was 64K and the disk size limit was 512K.

Soon afterwards `roff` evolved into `troff` with full typesetting capability. The first Unix book, *UNIX Programmer's Manual*, by Ken Thompson and Dennis Ritchie, was published on November 3, 1971. The book described more than 60 commands, including `b` (compile a B program), `chdir` (change working directory), `chmod`, `chown`, `ls`, and `who`.

By 1971, many fundamentally important aspects of Unix were already in place, including file ownership and file access permissions.

The first commercial Unix system was installed in early 1972 at the New York Telephone Co. Systems Development Center under the direction of Dan Gielan. Neil Groundwater build an Operational Support System in PDP-11/20 assembly language.

With funding from the Patent Department, the Unix team upgraded to a DEC PDP-11/45.

In 1972, Dennis Ritchie and Ken Thompson rewrote the B programming language into `C`. Work started on converting Unix to `C`. Unix was originally written in assembly language and B, but by 1973 it had been almost completely converted to the `C language`. At the time it was common belief that operating systems must be written in assembly in order to perform at reasonable speeds. Writing Unix in `C` allowed for easy portability to new hardware, which in turn led to the Unix operating system being used on a wide variety of computers.

Ken Thompson invented the pipe in 1972. Pipes allow the output of one process to be used as the input for another. Pipes allow the Unix philosophy of having many small programs that each do one function very well and then write scripts that combine these small utility programs to accomplish bigger tasks.

By 1973, Unix was running at sixteen (16) sites, all within AT&T and Western Electric. Unix was presented to the public in an October 1973 conference and within six months the number of sites running Unix had tripled.

A version of Unix was published in the July 1974 issue of the *Communications of the ACM*, leading to widespread requests for copies. Under the antitrust consent decree with the U.S. government, Bell Labs was required to give a free copy to anyone who requested it. Ken Thompson personally signed a note for many of these early copies.

Because `C` was a complete, platform-independent programming language and Unix's more than 11,000 lines of code were written in C, it was possible to easily port Unix to any computer platform. And Unix did quickly spread to almost every available computer platform, becoming the first true universal operating system.

In fall of 1974, Ken Thompson went to the University of California at Berkeley to teach for a year. Ken Thompson, Bill Joy, and Chuck Haley worked together to create the Berkeley version of Unix, called the Berkeley Software Distribution, or more commonly BSD.

The source code for BSD Unix was widely distributed to students and other schools. Students at UC-Berkeley and other schools around the world worked on improvements and the BSD Unix replaced the Bell Laboratories Unix as the primary Unix.

BSD Unix added the `vi` editor, the C shell, the `Sendmail` email system, virtual memory, and support for TCP/IP (Transmission Control Protocol/Internet Protocol). Because email was built into the operating system, email was the method Unix used for sending notifications to the system administrator of system status, reports, problems, etc.

The Fifth Edition of Unix was released in 1975 and licensed to universities for free.

The PWB shell or Mashey shell, abbreviated `sh`, was a variation of the Thompson shell that had been augmented by John Mashey and others at Bell Labs. The Mashey shell was distributed with the Programmer's Workbench Unix in 1976.

The Bourne shell, created by Stephen Bourne at AT&T's Bell Labs (in New Jersey) as a scripting language, was released in 1977 as the default shell in the Version 7 Unix release distributed to colleges and universities. It gained popularity with the publication of *The UNIX Programming Environment* by Brian W. Kernighan and Rob Pike. The book was the first commercially published tutorial on shell programming.

The Bourne shell provided process control, variables, regular expressions, flow control, input/output control, and functions.

In 1977, the University of California, Berkeley, released the Berkeley Software Distribution (BSD) version of Unix, based on the 6th edition of AT&T Unix.

The C shell, abbreviated `csh`, was created by Bill Joy, a graduate student at the University of California, Berkeley. With additional work by Michael Ubell, Eric Allman, Mike O'Brien, and Jim Kulp, it was released in the 2BSD release of BSD Unix in 1978.

The C shell offered command history, aliases, file name completion, and job control.

It turned out that while the C shell was easier to use than the Bourne shell, it failed miserably as a scripting language. It became common to use the C shell for everyday interactive computing and to use the Bourne shell for script programming.

The improved C shell, abbreviated `tcsh`, was created by Ken Greer by September 1975 and merged into the C shell in December 1983. Ken Greer based the shell on the TENEX operating system (hence, the “t” in `tcsh`). Mike Ellis, Paul Placeway, and Christos Zoulas made major contributions to `tcsh`.

The release of the Seventh Edition of Unix in 1978 led to the divergence of Unix on the System V (Bell Labs) and BSD (Berkeley) paths. System V was often called sys-five. System V was the for pay version and BSD was the free open source version.

The Korn shell, abbreviated `ksh`, was created by David Korn at AT&T's Bell Labs and announced at USENIX on July 14, 1983. Mike Veach and Pat Sullivan were also early contributors. The Korn shell added C shell features to the Bourne shell (command history and history substitution, command aliases, and file name completion). The Korn shell also added arrays and built-in integer arithmetic.

When the AT&T broke up in 1984 into “Baby Bells” (the regional companies operating local phone service) and the central company (which had the long distance business and Bell Labs), the U.S. government allowed them to start selling computers and computer software.

AT&T gave academia a specific deadline to stop using “encumbered code” (that is, any of AT&T's source code anywhere in their versions of Unix). This led to the development of free open source projects such as FreeBSD, NetBSD, and OpenBSD, as well as commercial operating systems based on the BSD code.

Meanwhile, AT&T developed its own version of Unix, called System V. Although AT&T eventually sold off Unix, this also spawned a group of commercial operating

systems known as Sys V Unixes.

Unix quickly swept through the commercial world, pushing aside almost all proprietary mainframe operating systems. Only IBM's MVS and DEC's OpenVMS survived the Unix onslaught.

Some of the famous official Unix versions include Solaris, HP-UX, Sequent, AIX, and Darwin. Darwin is the Unix kernel for Apple's OS X, AppleTV, and iOS (used in the iPhone, iPad, and iPod).

The BSD variant started at the University of California, Berkeley, and includes FreeBSD, NetBSD, OpenBSD, and DragonFly BSD.

The original Sun OS was based on BSD, but Solaris V5 was based on System V, release V.

Most modern versions of Unix combine ideas and elements from both Sys-V and BSD. HP-UX and Solaris are primarily System V, while AIX and Mac OS X are hybrids of both flavors of Unix.

Other Unix-like operating systems include MINIX and Linux.

In 1983, Richard Stallman founded the GNU project, which eventually provided the tools to go with Linux for a complete operating system.

In 1986, Maurice J. Bach of AT&T Bell Labs published *The Design of the UNIX Operating System*, which described the System V Release 2 kernel, as well as some new features from release 3 and BSD.

In 1987, Andrew S. Tanenbaum released MINIX, a simplified version of Unix intended for academic instruction.

`bash`, which stands for Bourne Again SHell, was created by Brian Fox for the Free Software Foundation and first released on June 7, 1989. `bash` combined features from the Bourne shell, the C shell, and the Korn shell. Bash also introduced name completion for variable names, usernames, host names, commands, and file names, as well as spelling correction for pathnames in the `cd` command, arrays of unlimited size, and integer arithmetic in any base between 2 and 64. `bash` is now the primary shell in Linux and was the primary shell for Mac OS X until Catalina in 2019 when Apple switched to `zsh` because of a change in the license for `bash`.

The Z shell, abbreviated `zsh`, was written by Paul Flastad in 1990 when he was a student at Princeton University.

The Linux operating system was first released on September 17, 1991, by Finnish student Linus Torvalds. With the permission of Andrew S. Tanenbaum, Linus

Torvalds started work with MINIX. There is no MINIX source code left in Linux. Linux Torvalds wrote Linux using the GNU C compiler running on MINIX on an Intel 80386 processor.

Linus Torvalds started work on open source Linux as a college student. After Mac OS X, Linux is the most widely used variation of Unix.

Linux is technically just the kernel (innermost part) of the operating system. The outer layers consist of GNU tools. GNU was started to guarantee a free and open version of Unix and all of the major tools required to run Unix.

In 1992 Unix System Laboratories sued Berkeley Software Design, Inc and the Regents of the University of California to try to stop the distribution of BSD Unix. The case was settled out of court in 1993 after the judge expressed doubt over the validity of USL's intellectual property.

See the [appendix](#) for a more detailed summary of the history of computers.

choice of shells

chapter 4

summary

This chapter looks at the shells available for Linux and Unix.

This includes an explanation of what a shell is and a list of the popular shells.

what is a shell?

Unix (and therefore also Mac OS X and Linux) has more than 200 basic commands (also called tools or utilities) that are distributed with the standard operating system. This collection and the ease with which they work together is the major source of the power of Unix. The vast majority of these standard tools are designed to be used from a command line (the shell).

A shell is primarily a command interpreter.

In a graphical user interface such as Macintosh or Windows, the user controls the computer and programs primarily through pointing and clicking, supplemented by some typing.

In a shell, all of the commands are typed. The shell figures out the meaning of what you typed and then has the computer do as instructed.

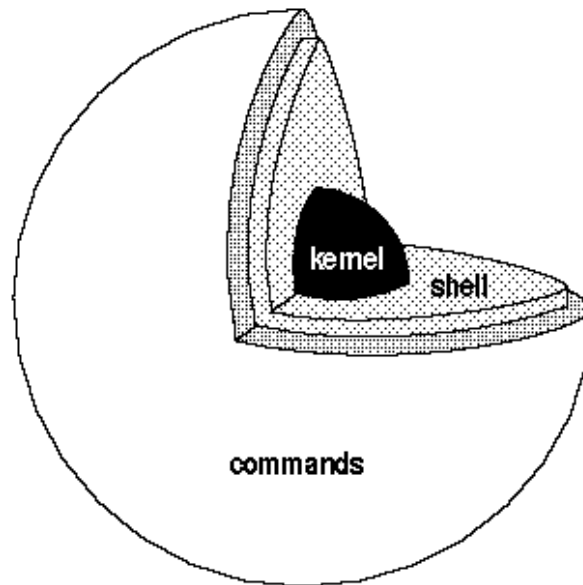
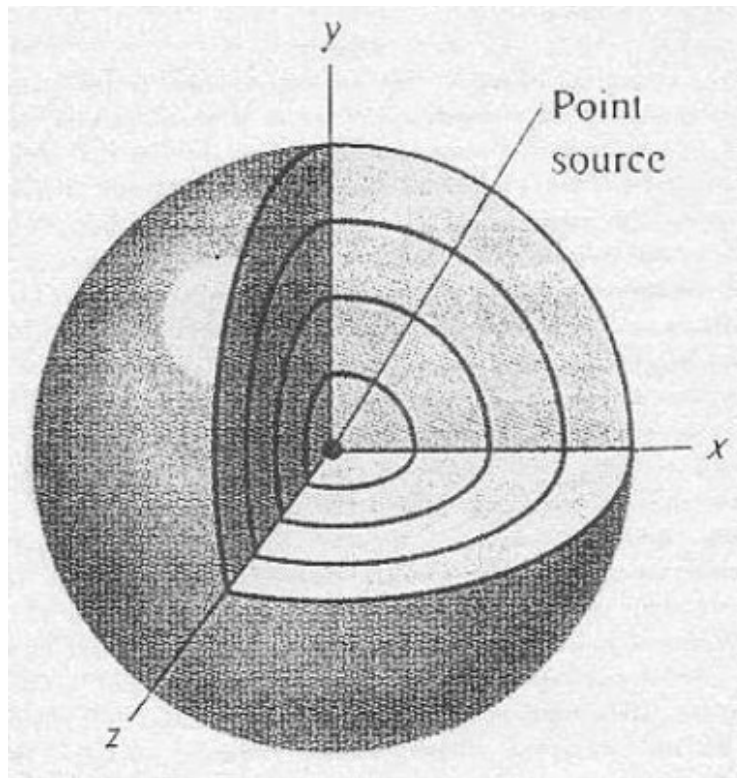
But the shell is much more than just a command interpreter. It is also a complete programming language.

Because the shell is a complete programming language, with sequences, decisions, loops, and functions, it can do things well beyond pointing and clicking. It can take control of your computer and react to changing circumstances.

Programming languages are used to make all of the computer programs and smart phone apps you've ever seen or used. Your imagination is the only limit on the power of the shell. Anything that can be done with a computer can be done with the shell.



The term *shell* is derived from the idea of concentric layers that occur in many seashells. One view is that programs can be run inside of the shell, including other copies of the shell. These layers can be arbitrarily deep. An inverse view is that the kernel is the inner most layer, with the shell wrapped around the kernel and application programs wrapped around the shell.



choice of shells

Most versions of Unix and Linux offer a choice of shells.

The term shell comes from a concept of Unix being a series of layers of software that work together rather than one single monolithic operating system program. The command line shell was part of the outer shell of a series of programs that eventually reach down to the kernel or innermost portion of the operating system.

Most shells are related to either the Bourne Shell or the C Shell.

Steve Bourne created the original Bourne shell called `sh`.

Some famous shells were C Shell (`csh`), Korn Shell (`ksh`), TENEX C Shell (`tcsh`), and the Z Shell (`zsh`). A shell that combined the major advantages of each of these early shells was the Bourne Again SHell (BASH).

The default shell in Linux and Windows Subsystem for Linux, as well as for a long time on MacOS X is normally BASH (Bourne Again SHell). The following instruction assumes the use of BASH.

It is possible to change the shell you are currently using (especially useful if you need to run a line or script from an alternative shell).

original shell

The original shell, called the Thompson shell and abbreviated `sh` was written by Ken Thompson at AT&T's Bell Labs, was very rudimentary. The Thompson shell was distributed with Versions 1 through 6 of Unix, from 1971 to 1975.

Note that the same `sh` is also used for other shells, including the Bourne shell.

The PWB shell or Mashey shell, abbreviated `sh`, was a variation of the Thompson shell that had been augmented by John Mashey and others at Bell Labs. The Mashey shell was distributed with the Programmer's Workbench Unix in 1976.

Bourne shell

Stephen Bourne created the Bourne shell, abbreviated `sh`, at AT&T's Bell Labs in New Jersey as a scripting language.

The Bourne shell was released in 1977 as the default shell in the Version 7 Unix release distributed to colleges and universities. It gained popularity with the publication of *The UNIX Programming Environment* by Brian W. Kernighan and Rob Pike. The book was the first commercially published tutorial on shell programming.

The Bourne shell (or a shell that is compatible and will run Bourne shell scripts) is usually located at `/bin/sh`.

You will also see references to the Bourne shell as `bash`.

The Bourne shell has a command language based on the **ALGOL programming language**, including process control, variables, regular expressions, flow control (decisions and loops), powerful input and output control, and functions.

Despite its power, the original Bourne shell was difficult to use and lacked file

name completion, command history, aliases, and had difficulty running multiple background jobs.

C shell

The C shell, abbreviated `csh`, was created by Bill Joy, a graduate student at the University of California, Berkeley. With additional work by Michael Ubell, Eric Allman, Mike O'Brien, and Jim Kulp, it was released in the 2BSD release of BSD Unix in 1978.

The C shell was based on the style of the C programming language.

The C shell was much easier to use than the Bourne shell, but was unable to perform anything other than the most simple scripts.

The C shell lacked functions, had weak input and output control, and had limited programming ability due to a poorly written command interpreter (Bill Joy explained that at the time he didn't know about many standard compiler techniques).

The power of the C shell for everyday interactive use was due to its introduction of command history, aliases, file name completion, and job control.

It became common to use the C shell for everyday interactive computing and to use the Bourne shell for script programming.

The improved C shell or TENEX C shell, abbreviated `tcsh`, was created by Ken Greer by September 1975 and merged into the C shell in December 1983. Ken Greer based the shell on the TENEX operating system (hence, the "t" in `tcsh`). Mike Ellis, Paul Placeway, and Christos Zoulas made major contributions to `tcsh`.

The Hamilton C Shell was written in 1988 by Nicole Hamilton of Hamilton Laboratories for the OS/2 operating system. In 1992, the Hamilton C Shell was released for Windows NT. The OS/2 version was discontinued in 2003. The Windows version, with adaptations for Windows peculiarities, is still in use.

Korn shell

The Korn shell, abbreviated `ksh`, was created by David Korn at AT&T's Bell Labs and announced at USENIX on July 14, 1983. Mike Veach and Pat Sullivan were also early contributors.

After years of Unix users having to learn two different shells, one for scripting and one for interactive control, David Korn built the Korn shell by adding C shell features to the Bourne shell.

In addition to adding command history, history substitution, aliases, and file name completion from the C shell, the Korn shell also included arrays and built-in integer arithmetic.

The three major versions of the Korn shell are the official version `ksh`, the public domain version `pdksh`, and the desktop version `dtksh`.

CDE shipped with the Desktop version of the Korn shell.

The POSIX shell is a variant of the Korn Shell. HP shipped the POSIX shell with HP-UX 11.0.

BASH shell

`bash`, which stands for Bourne Again SHell, was created by Brian Fox for the Free Software Foundation and first released on June 7, 1989.

`bash` combined features from the Bourne shell, the C shell (both the original C shell and `tcsh`), and the Korn shell, while using the syntax of the original Bourne shell, allowing it to run almost all historical Bourne shell scripts. `bash` is now the primary shell in both Linux and Mac OS X.

`bash` introduced name completion for variable names, usernames, host names, and commands (in addition to file names), spelling correction for pathnames in the `cd` command, arrays of unlimited size, and integer arithmetic in any base from 2 to 64.

Z shell

The Z shell, abbreviated `zsh`, was written by Paul Flastad in 1990 when he was a student at Princeton University.

The Z shell combines features of the Bourne Shell, the C shell, and `bash`.

other shells

The POSIX shell, abbreviated `sh`, (POSIX = Portable System Interface) is based on the Korn shell and is the official IEEE P1003.2 shell. It is the `/bin/sh` shell on some systems.

The Almquist shell, abbreviated `ash`, was written by Keneth Almquist as a replacement for the Bourne shell written for BSD systems. The `sh` in FreeBSD and NetBSD were based on the Almquist shell.

The Debian Almquist shell, abbreviated `dash`, is a modern replacement for the Almquist shell in Debian and Ubuntu Linux. While the default shell in both Debian

and Ubuntu Linux are `bash`, `/bin/sh` is a symlink to `ash`.

`ash` and `dash` are minimalist shells that interpret scripts and are not intended for interactive use. Their small size and fast execution time make them good for embedded systems. Because many scripts call for the use of `/bin/sh`, Debian and Ubuntu Unix gain speed of execution for scripts, while still allowing `bash` as the primary interactive shell.

The Public domain Korn shell, abbreviated `pdksh`, is based on the Korn shell.

The MirBSD Korn shell, abbreviated `mksh`, is based on the OpenBSD version of the Korn shell and the `pdksh` and was released as part of MirOS BSD.

Busybox is a set of tiny utilities, including a version of `ash`, used in embedded systems.

`rc`, written by Tom Duff, was the default shell for AT&T's Bell Labs' Plan 9 and Version 10 Unix. Plan 9 was an improved operating system based on Unix, but was not a significant enough improvement to overtake its predecessor. `rc` is available on some modern versions of Unix and Unix-like operating systems.

`es` is an `rc`-compatible shell written in the mid-1990s for functional programming.

Perl shell, abbreviated `psh`, is a shell that combines `bash` and the `Perl` scripting language. it is available for Unix-like and Windows operating systems.

Friendly interactive shell, abbreviated `fish`, was released in 2005.

`pysh` is a profile in the IPython project that combines a Unix-style shell with a Python scripting language shell.

`wish` is a windowing shell for Tcl.Tk.

Which Shell to Use

from [Google Shell Style Guide](#)

`Bash` is the only shell scripting language permitted for executables.

Executables must start with `#!/bin/bash` and a minimum number of flags. Use `set` to set shell options so that calling your script as `bash <script_name>` does not break its functionality.

Restricting all executable shell scripts to **bash** gives us a consistent shell language that's installed on all our machines.

The only exception to this is where you're forced to by whatever

you're coding for. One example of this is Solaris SVR4 packages which require plain Bourne shell for any scripts.

connecting to a shell

chapter 5

summary

This chapter looks at how to connect to a shell.

On your local desktop or laptop computer, many of these steps won't apply, but you will probably need most or all of the steps when logging in remotely to control a server.

If you are connecting to a remote computer (such as web server), then you can use `telnet` or `SSH`.

If you connecting to the shell from a modern graphic user interface, then you need to start up a terminal emulator.

If you connecting to a mainframe computer, minicomputer, or the equivalent, you use any terminal connected to the system.

NOTE: On a single-user Linux or Mac OS X desktop/laptop computer, you can start the Terminal program and be automatically signed in (no need for account login or password). On a remote server, you will always need to login in with at least account name and password.

physical terminal

For old style systems where Unix runs on a mainframe or minicomputer, there will

be actual physical terminals that are connected by wires or MODEM to the mainframe or minicomputer. These systems are increasingly rare.

The terminal may already be at the `login` prompt. If not, try pressing the RETURN key several times until the `login` prompt shows up.

Telnet and SSH

`telnet` or `SSH` are the two basic methods for connecting to a remote server.

`telnet` was the original method. There are `telnet` client programs available for most computer systems. Unfortunately, `telnet` performs all communications in plain text, including passwords, which means that anyone malicious along the path between you and your server can easily read the information needed to hack into your system using your account. For this reason, many servers no longer allow `telnet` access.

`SSH` is Secure Shell. It has the same basic capabilities as the older `telnet`, but includes security, including encrypted communications. There are `SSH` client programs for most modern computer systems.

You can also use `SSH` through a terminal emulator, which is how many system administrators now access their servers from their personal or portable computer.

terminal emulator

As mentioned in the [history](#) chapter, the UNIX shells were accessed through interactive terminals, originally teletype machines and later special combinations of keyboards and cathode ray tubes (CRTs).

There are programs for graphic user interfaces that allow you to interact with a shell as if you were using one of those ancient terminal devices. These are called terminal emulators (they emulate the signals of a terminal).

Some common terminal emulators include `eterm`, `gnome-terminal`, `konsole`, `kvt`, `nxterm`, `rxvt`, `terminal`, and `xterm`.

Note that if you are logging in to a web server or other remote computer, you should use an `SSH` (Secure SHell) client program instead of a terminal emulator. A terminal emulator program is for gaining shell access to a personal computer or workstation. With a little bit more knowledge, you can use the shell on a personal computer or workstation as your `SSH` client.

special settings

If you are starting up Terminal from a modern operating system, you will almost

always be able to start using the shell without any login name or password.

If you are logging in to a remote server you may need a few pieces of additional information beyond just your login name and password.

Terminfo: You may need to know the Terminfo name for your terminal. The Terminfo name is used to set the characteristics of your terminal. A common default is the old DEC VT-100 terminal. On old (early) versions of UNIX you may have to use a Termcap name instead of a Terminfo name.

End of line: On most modern systems, the RETURN key will indicate the end of line. On some older systems you may find a RET, NEWLINE, ENTER< or other key that serves this purpose. On some systems, that have both a RETURN and an ENTER key, both will serve the same purpose.

Erase key: On most modern systems, the DELETE key will erase one character at a time. Typically the CONTROL-H combination (hold down both the H key and the CONTROL key, sometimes marked CNTRL or CTRL) will also work as an erase key. On some older systems, the # key will also serve as the erase key.

Line kill key: On some older systems the @ key deletes the entire line being entered.

Interrupt key: There is typically a key that will interrupt the execution of running programs.

You can find out these items from the tech support for your web hosting, from the system administrator of a system, or from the manual for your system.

shell basics

chapter 6

summary

This chapter looks at Unix (and Linux) shell basics.

This includes an explanation of what a shell is, how to get to your shell, and a simple example of how to use your shell.

The short version of this chapter is to start up your terminal emulator (or SSH client), type in your account name at the `login` prompt, followed by your password at the `password` prompt (using the RETURN or ENTER button at the end of each line). Then type a valid command (such as `who`) and an invalid command (such as `asdf`) and see the results. The rest of the commentary helps you through common questions and problems.

guide conventions

The following conventions are used in this guide.

Examples are displayed in a gray box.

Additionally, anything that will appear on the screen (whether you type it or the shell produces it as output) will appear in a monospace type. This will help identify the examples in the PDF version. This also applies to material contained in ordinary descriptive paragraphs that you will type.

```
$ date
Wed Nov 10 18:08:33 PST 2010
$
```

Bold face type is used to indicate items that you type.

There will be no indication of the correct locations to type RETURN or ENTER or

other similar special characters. These normally happen at the end of every input line. There will be reminders in the descriptive text near the beginning of the book, as well as in other descriptive text where there is a need for a special reminder or an unusual convention or an unusual keystroke.

```
$ date
```

Bold italics type is used to indicate items that you must customize, such as file names or user account name. In a descriptive paragraph, these items will be in *ordinary italics*.

```
$ AccountName
```

Material that the shell will output will be in ordinary `monospace` type. In some cases where the material will be variable, the shell output will be in *italics*.

```
Wed Nov 10 18:08:33 PST 2010  
VariableInformation  
$
```

root or superuser

Do **not** run your terminal emulator or shell in root or superuser.

Root or superuser has complete control over the entire computer. A regular user account has limitations.

Experienced programmers run BASH as a regular user to protect themselves from destructive mistakes — and they are already skilled at using BASH.

A beginner running BASH as superuser or root can turn a simple typing mistake into a disaster.

If you already have a regular user account created, make sure you use it. If you only have the superuser or root account running, immediately create a regular user account and switch to it for all of your learning exercises.

Both the Bourne style shells (including BASH) and the C style shells display a # prompt when you are running the shell as root. Be careful.

```
#
```


starting your shell

NOTE: On a single-user Linux or Mac OS X desktop/laptop computer, you can start the Terminal program and be automatically signed in (no need for account login or password). On a remote server, you will always need to login in with at least account name and password.

Some information you may need includes the name or URL of your server or computer (sometimes called the host), your account name, and your assigned password. If you are working on a remote server (such as a web server), you need to get this information from your hosting company or system administrator. If you are using a large multi-user system, you need to get this information from your system administrator. If you are using a personal computer or workstation, you probably set these for yourself.

If you have just purchased a new personal computer or workstation, ask your salesperson for the defaults or look them up in the manual. Your install CD or DVD is likely to have a utility that can be used to create accounts and set passwords. The Mac OS X install DVD has utilities for both purposes.

If you are the first person to work with a large system or computer, refer to the manuals that came with your computer. You will find information on the root/superuser account. That is a powerful account and should be reserved for special occasions when that kind of power is needed. Look in the manual section with a title similar to “Getting Started” and then look for an account named *user*, *guest*, *tutor*, or similar name that suggests an ordinary user account.

You login remotely into a web server through SSH (Secure SHell). There are many SSH programs available. You do not have to have a matching operating system. You can use an SSH client program on Windows, Macintosh, Linux, or almost any other operating system to sign into a Linux or UNIX server.

You login into a large multi-user traditional command line UNIX system by typing your user name, ENTER, your password, and ENTER (in that order). This will enter you into the default shell set up for your account.

On a computer that runs a graphic interface (such as Gnome, KDE, and Mac OS X) you will want to use a terminal emulator program. Typically a terminal emulator program starts with you already logged-in to the same account that you have running in the graphic user interface.

On Mac OS X and most versions of Linux, the icon for the Terminal program will look like this:



On a Mac OS X computer, Terminal will be located in the Utilities directory, which is located in the Applications directory. When you find it, you can drag it onto the Dock to make it easily accessible. Apple purposely hid the UNIX command line to avoid confusing the typical consumer.



On Linux/KDE, look for Konsole or Terminal in the Utilities menu.

On Linux/Gnome, look for color xterm, regular xterm, or gnome-terminal in the Utilities menu.

On Ubuntu Linux, look in Applications menu > Accessories > Terminal. Single click and hold, then drag to your panel, because you will be using it a lot.

On some versions of Linux, you can press the CONTROL and the ALT and the F1 keys all at once to bring up Terminal.

In Gnome, use the Applications menu > Accessories > Terminal or the keyboard shortcut of CONTROL and ALT and T (all at the same time).

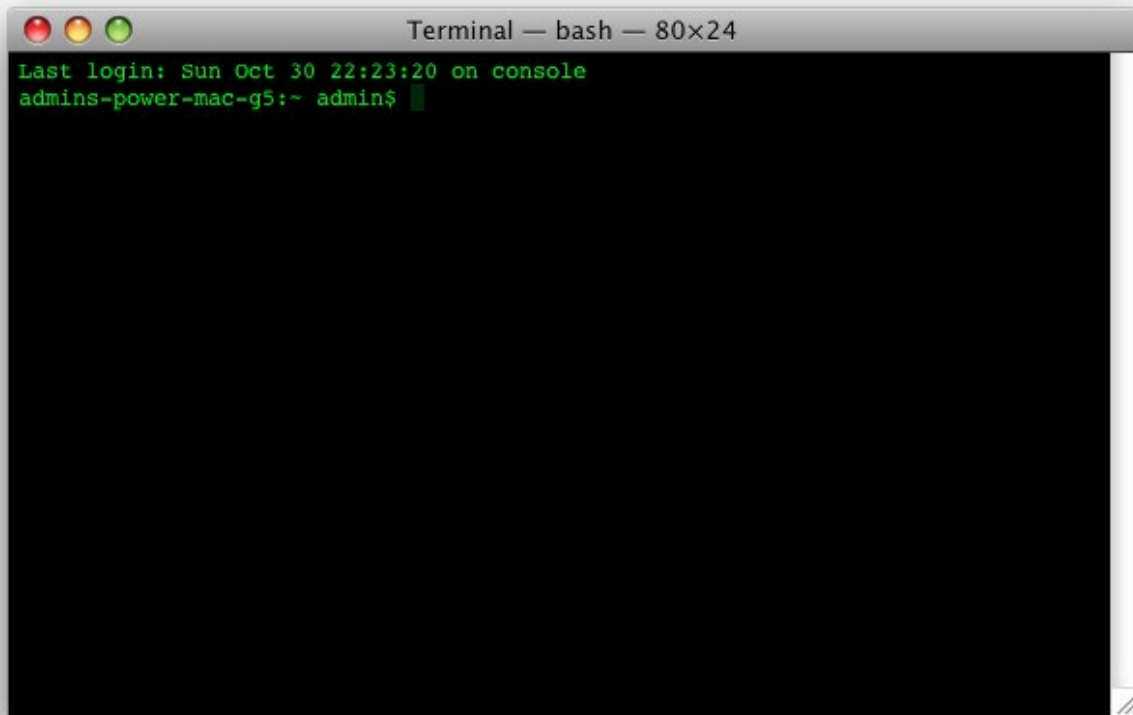


In KDE, use the KMenu > System > Terminal Program (Konsole).

In Linux Mint you can use the keyboard shortcut of holding down the CONTROL and ALT and T keys all at once.

As a last resort, you can use the file search feature in Linux or Mac OS X and search for “Terminal”.

You may want to try out the various terminal emulators and decide which works best for you (each offer slightly different features).



login and password

NOTE: On a single-user Linux or Mac OS X desktop/laptop computer, you can start the Terminal program and be automatically signed in (no need for account login or password). On a remote server, you will always need to login in with at least account name and password.

At the `login` prompt type your account name (in lower case letters) followed by ENTER or RETURN.

```
login: accountname
Password:
```

At the `password` prompt type your password followed by ENTER or RETURN.

```
Password: password
$
```

If you encounter problems, see the [next chapter](#) for help.

prompt

Once the shell is running it will present a shell prompt. This shell prompt is normally the U.S. dollar sign (\$). Other common prompts are the percent sign (%) and the pound sign (#). The shell prompt lets you know that the shell is ready and waiting for your input.

```
$
```

The most common prompt in the Bourne shell (`sh` or `bsh`) and Bourne Again shell (`bash`) and Korn shell (`ksh`) is the U.S. dollar sign (\$).

```
$
```

When the the Bourne Again shell (`bash`) or Korn shell (`ksh`) is running as root or superuser, the prompt is changed to the U.S. number or pound sign (#) as a clear reminder that you are using a much more powerful account.

```
#
```

The Bourne Again shell (`bash`) shell typically reports the current working directory and user name before the \$ prompt, often inside of square braces. An example:

```
[admin:~ admin]$
```

The most common prompt in the C shell (`csh`) and TENEX C shell (`tsch`) is the percent sign (%).

```
%
```

When running as root or superuser, the C shell (`csh`) shows the U.S. number or pound sign sign (#).

```
#
```

The Z shell (`zsh`) shows the short machine name followed by the percent sign (%).

```
mac%
```

When running as root or superuser, the Z shell (`zsh`) shows the short machine name followed by the U.S. number or pound sign sign (`#`).

```
mac#
```

Almost all of the shell examples in this book will use **bold face** to show what you type and plain fixed space characters to show shell output. Items that you need to modify according to your local needs are normally going to be presented in *italics*.

You are likely to see information before the actual command prompt. It may be the current working directory. It may be the current user name. There are ways to change what is presented. For now, don't worry about it, just be aware that you are likely to see some text before the prompt.

example command

You can run a UNIX (or Linux or Mac OS X) command (also called a tool) by typing its name and then the ENTER or RETURN key.

The following example uses the **date** command or tool.

```
$ date  
Wed Nov 10 18:08:33 PST 2010  
$
```

The format is: day of the week, month, day of the month, 24 hour time, time zone, year.

failed command

BASH will let you know when you have typed something it doesn't understand.

Type “asdf” and then the ENTER or RETURN key. You should see a message similar to the following:

```
$ asdf  
-bash: asdf: command not found  
$
```

no news is good news

BASH follows the rule that no news is good news. If a command runs successfully,

it won't generate any output message.

As an example, when you use the `cp` command to copy a file, there will be no special notice on success. You will just be returned to the command prompt (`$`), ready for the next command.

login/logout

chapter 7

sumamry

This chapter looks at `login` and `logout`, a pair of UNIX (and Linux) commands.

On a personal computer or workstation you probably don't need to `login`. You can just start your terminal emulator (see [previous chapter](#)).

On a multi-user UNIX or Linux system, such as a web server, you will need to `login`. This chapter furthers the discussion `login` in more detail than the [previous chapter](#)'s introduction, including special cases and solutions to common problems.

In particular, this chapter discusses choosing the system and terminal type, rare options that you might encounter.

This chapter also discusses the `logout` command and the importance of always logging out from a running system.

NOTE: On a single-user Linux or Mac OS X desktop/laptop computer, you can start the Terminal program and be automatically signed in (no need for account login or password). On a remote server, you will always need to login in with at least account name and password.

always need to login in with at least account name and password.

login

`login` is a UNIX command for logging into a UNIX system.

`login` is a builtin command in `csh`. There is also an external utility with the same name and functionality.

In many modern systems, the functionality of `login` is hidden from the user. The `login` command runs automatically upon connection. In some old computers you may

need to type a special character or even type `login` to bring up the login program.

If you login remotely to a server you will be prompted for your user/account name and password. If you start up a terminal emulator and shell from a graphic user interface you will probably already be authenticated and immediately go to the shell (although some of the startup activity of login will still be done for you).

The activities that login performs at startup of a shell will be covered in a later chapter, because you need more familiarity with the shell before you can understand that material.

Starting a shell is covered in the previous chapter about [shell basics](#).

select system or host

If you are signing into a system that combines multiple computers, you will first need to indicate which computer you are logging into.

You may already be logged in if you are using a terminal emulator on a personal computer or workstation. If so, you don't need this step.

You will see a prompt indicating a choice of computer, such as (only one of these will appear):

```
host:
pad:
request:
system:
```

You will see only one of these (or similar) choices.

If you see `login:` instead, then you don't have to worry about choosing the system.

Enter the identifying name of the computer system you were assigned to use, followed by the ENTER or RETURN key. Your system administrator can provide you with this information.

On some networked systems you can abbreviate with the first two or three characters of the computer name (as long as it is enough to uniquely identify which computer is intended).

If you are successful, you will be presented with the `login:` prompt.

account name

You may already be logged in if you are using a terminal emulator on a personal computer or workstation. If so, you don't need this step.

Ask your system administrator for your account name. If this is your own personal system, then use the account name set up during installation. Many modern install disks include a utility for creating a new account.

At the `login:` prompt, enter your account name, followed by the ENTER or RETURN key.

Type your account name in lower case letters. UNIX assumes that an account name in ALL CAPITAL LETTERS indicates an old input/out device that doesn't support lower case letters (such as an old style teletype, or TTY). Also, if you use upper case letters for the login, then you can not use lower case letters in the password.

If you enter a valid account name, you will be asked for your password. On many computers, you will be asked for a password even if you enter an incorrect account name. This is a security measure to help prevent guessing account names.

```
login: accountname
Password:
```

password

You may already be logged in if you are using a terminal emulator on a personal computer or workstation. If so, you don't need this step.

Ask your system administrator for your password. If this is your own personal system, then use the password set up during installation. Many modern install disks include a utility for changing the password for an existing account or for creating a new account with a new password.

At the `Password:` prompt, enter your password, followed by the ENTER or RETURN key.

```
Password: password
$
```

In some cases, a new account doesn't have a password. Also, it is common for Mac OS X to have no password for the user account.

If your account doesn't have a password, just press the ENTER or RETURN key.

Change your password to a secure password at your earliest opportunity. If you

don't know how to do this yet, the upcoming chapter on [passwd](#) (yes, that is the correct spelling) will tell you how. That same chapter gives advice on how to select a secure password.

Failure will be indicated by an error message. The exact error message varies by system, but will probably be something similar to:

```
Login incorrect
```

The most likely reasons are:

1. Incorrect account name.
2. Incorrect password.
3. You typed the account name in upper case letters (check the CAPS LOCK key).

You should have a new login prompt and can easily start over.

If you logged in in upper case, the shell will display in upper case letters and expect you to type only in upper case letters.

If you accidentally typed the account name in upper case letters, but haven't yet typed in the password, many UNIX systems will display a backslash character in front of the password prompt.

If you realize you made a mistake on the account name and want to start over, hold down the CONTROL key (often marked CTRL) and the D key at the same time. This will stop the login program and start over again from the beginning.

Note that at one time there was a security hole because of the Control-D. A hacker would start the login, type Control-D, and then try to slip in a command to the shell before a new login program could be started. This security hole no longer exists on shell login, but this same type of timing attack is still used for other security holes.

terminal type

On some older UNIX systems you may be asked to provide the terminal type you are using. Some modern terminal emulator programs offer the choice of emulating various different terminals from the early UNIX era. These different terminal types had different specialized capabilities.

Because the early traditional UNIX was created primarily on Digital Equipment Corporation (DEC) computers (first the PDP, followed by the VAX), the default terminal device was the DEC VT100. Most modern terminal emulator programs act

like the VT100.

On older UNIX systems you may see the terminal type prompt:

```
Term:
```

In some cases, the prompt may give the default terminal setting in parenthesis.

```
Term = (VT100)
```

If the default terminal setting is correct, simply press the RETURN or ENTER key.

Otherwise, type in the correct terminal type, followed by the ENTER or RETURN key.

If you are uncertain, try the `vt100` or `UNKNOWN`, followed by ENTER or RETURN.

Some common terminal types:

- `h19`
- `tvi925`
- `vt100`
- `wyse50`

After you are logged in, you can set the terminal type (capitalization matters).

Shell	Command
<code>csh</code> or <code>tcsh</code>	<code>setenv TERM vt100</code>
<code>sh</code>	<code>TERM=vt100; export TERM</code>
<code>ksh</code> , <code>bash</code> , or <code>zsh</code>	<code>export TERM=vt100</code>
VMS	<code>set term/device=vt100</code>

If you do not know your shell type, use the following command (followed by ENTER or RETURN):

```
$ echo $SHELL
```

You will need to enter the appropriate command each time you login.

Alternatively, you can add the appropriate command line to the initialization file in your home directory.

Shell	Login file
csh	.cshrc or .login
tcsh	.cshrc
ksh	.profile .kshrc
zsh	.zshrc
bash	.bash_profile
remote shell	.rhosts

VMS users need to modify the login.com file, adding the line `$set term/device=vt100 .`

logout

When you finish using the shell, type the `exit` or `logout` command. This will either display a new login prompt or close the terminal emulator window. If you are logged in remotely to a server, this will break your connection. If you are logged in physically on a large UNIX system, this will prevent someone else from abusing your account.

When you finish using the shell, type the `exit` or `logout` command. This will either display a new login prompt or close the terminal emulator window. If you are logged in remotely to a server, this will break your connection. If you are logged in physically on a large UNIX system, this will prevent someone else from abusing your account.

Some of the possible variations of this command include: `bye`, `exit`, `lo`, `logout`, and `quit`.

Typing `Ctrl-L-D` (holding down the `CONTROL` key and the `D` key at the same time) will also log you out of most shells. The `Ctrl-D` tells the shell it has reached the end-of-file (EOF). Because the shell is a filter and filters terminate when EOF is reached, the shell terminates and you log off the system or return to the parent process.

While it might not be a big deal to skip this step on a single user computer that you never leave unattended, forgetting to logout from a remote server is a serious security hole. If you leave your computer or terminal unattended, someone else can sit down and gain access to all of your files, including the ability to read, modify, or delete them. The imposter can send spam emails from your user ID. The imposter can even use your computer or account to attempt to hack or damage or break into any system in the world from your user ID. If this occurs from a school or business account, you will be responsible for any damage done.

Most modern systems accept either `logout` or `exit`.

On Mac OS X, typing `logout` produces the following result:

```
$ logout  
[Process completed]
```

On Mac OS X, typing `exit` produces the following result (notice that the shell automatically runs `logout` for you):

```
$ exit  
logout  
[Process completed]
```

A successful `logout` will stop all running foreground or background processes. There is a way to keep processes running, which is useful for things like starting up your Apache web server and MySQL data base, but the method will be discussed later.

```
$ logout  
There are suspended jobs.
```

If you see the message “There are stopped jobs.” it means that you have one or more suspended jobs. The shell is letting you know in case you forgot about them. If you type `logout` again without running the `jobs` in between, the system will go ahead and log you out and terminate all suspended jobs.

`logout` is a builtin command in `csh`.

exit

`exit` is a built-in shell command (for the shells that support it), while `logout` is a program. In the `csh` (C Shell), `logout` is an internal built-in command. `sh` (the

original Bourne shell) and ksh (the Korn Shell) do not officially have the `logout` command, but many modern versions support it.

`exit` can be used by itself as a substitute for `logout` (as mentioned above).

`exit` can also be used to send a return value (often an error code) to the parent process. Simply add an integer following `exit`. This is particularly useful in scripting.

```
$ exit n
```

passwd

chapter 8

summary

This chapter looks at `passwd`, a Unix (and Linux) command.

`passwd` is used to change your password.

This chapter also includes the list of the 100 worst (most commonly used) passwords.

As mentioned in the [previous schapter](#), you should change your password from the original default or assigned password to a secure password that nobody else knows. And please don't leave the new password on a sticky note attached to your computer.

syntax:

```
passwd [options...] [user]
```

shells:	ash	bash	bsh	csH	ksh	sh	tcsh	zsh
File Name:	passwd		Directory:	/usr/bin/			Type:	External

setting your password

Type `passwd` followed by the ENTER or RETURN key.

```
$ passwd
```

You will be prompted to give your current (old) password (to make sure it is really

you) and then prompted to enter your new password twice. For security purposes, the password is typically replaced with asterisks or some other character so that nobody can read your password over your shoulder. To make sure that you have typed what you thought you typed you are asked to type the new password twice. The two copies must match before your new password replaces your old password.

local password

The password set by `passwd` is your *local* password. On a single user system, this is probably your only password.

On Mac OS X the use of the `passwd` may or may not be sufficient to change your password for the entire system. This depends on which version of Mac OS X you are using. It is best to change your password using the install disc. If you do not have a copy of the install disc, there are instructions on the internet on how to manually change the password.

On a large system, there may be multiple passwords spread across multiple computers. The `passwd` command will only change the password on the one server that you are currently logged into (normally through SSH). You may need to use `yppasswd` or a web interface to change your password for the entire system.

You can check for your account or username in `/etc/passwd`. If it's not listed there, then don't use the `passwd`. Check with your system administrator.

periodic changes

Whenever you first login into a new system, the first thing you should do is change your password. In particular, immediately change the initial root password for a new system. Leaving the initial default password is a huge security hole and hackers do try all of the standard default passwords to see if they can find an easy way into a computer. Even with a user account, it is common for initial passwords to be generated poorly and be easy for hackers to guess.

Additionally, you want to change your password on a regular basis. It only takes a few months to figure out a password through brute force attacks. Some systems require that you change your password on a regular basis. Once a month is a good time period. More often if you suspect that someone saw you typing or there is any other possibility that your password might have been compromised.

You can set up your account to remind you to change your password on a regular basis. If you are the system administrator, you can set up these reminders for everyone (and should do so). As system administrator you can even require that users change their passwords on a regular basis (or they become locked out and have to come to you to beg for re-entry). As system administrator you can also set up a system that requires

(or even suggests) secure passwords.

100 most common passwords

Always avoid the common passwords. These are the most common passwords as of June 2012:

1. password
2. 123456
3. 12345678
4. 1234
5. qwerty
6. 12345
7. dragon
8. pussy
9. baseball
10. football
11. letmein
12. monkey
13. 696969
14. abc123
15. mustang
16. michael
17. shadow
18. master
19. jennifer
20. 111111
21. 2000
22. jordan
23. superman
24. harley
25. 1234567
26. trustno1
27. iloveyou
28. sunshine
29. ashley
30. bailey
31. passw0rd
32. 123123
33. 654321
34. qazwsx
35. Football
36. seinfeld

37. princess
38. peanut
39. ginger
40. tigger
41. fuckme
42. hunter
43. fuckyou
44. ranger
45. buster
46. thomas
47. robert
48. soccer
49. fuck
50. batman
51. test
52. pass
53. killer
54. hockey
55. babygirl
56. george
57. charlie
58. andrew
59. michelle
60. love
61. jessica
62. asshole
63. 6969
64. pepper
65. lovely
66. daniel
67. access
68. 123456789
69. joshua
70. maggie
71. starwars
72. silver
73. william
74. dallas
75. yankees
76. 666666
77. hello
78. amanda
79. orange

80. biteme
81. freedom
82. computer
83. sexy
84. nicole
85. thunder
86. heather
87. hammer
88. summer
89. corvette
90. taylor
91. fucker
92. austin
93. 1111
94. merlin
95. matthew
96. 121212
97. golfer
98. cheese
99. martin
100. chelsea

Approximately 4.7% of all users have a password of *password*. 8.5% have one of the top two passwords. 9.8% (nearly one tenth) have one of the three top passwords. 14% have one of the top 10 passwords. 40% have one of the top 100 passwords. 79% have one of the top 500 passwords. 91% have one of the top 1,000 passwords.

secure passwords

It is important to have secure passwords.

The more characters, the more secure. A minimum of six or eight characters is barely adequate.

A strong mixture of characters for a password includes at least one capital letter, at least one lower case letter, at least one digit, and at least one punctuation character. You should avoid repeating any character more than once in the same password. The special character (such as !@#\$%^&*;,;) should not be the first or last character in the password.

Avoid using any word that occurs in your own or any other natural language. Hackers use a **dictionary attack** that tries words from the dictionary. Also avoid spelling words backwards, using common misspellings, or using abbreviations. Avoid using dates that are important to you (someone can easily look up your birthday or

anniversary on the world wide web). Avoid using names of family, friends, or even pets.

secure technique

A technique that generates decent passwords is to use a key phrase and then use the first letter of each word in the keyword. Sprinkle in digits and special characters (punctuation) and make some of the letters upper case and some lower case.

Never use the same password for more than one purpose. People have the tendency to reuse the same password over and over. If a hacker gets your password from one system, the hacker will see if it also works on your bank account and other systems.

superuser

The super user (root) can use the `passwd` command to reset any other user's password. There is no prompt for the current (old) password.

```
$ passwd username
```

The super user (root) can also remove a password for a specific user with the `-d` option. The disable option then allows the specified user to login without a password. This applies to Linux and Solaris only.

```
$ passwd -d username
```


command structure

chapter 9

summary

This chapter looks at simple Unix/Linux commands to get you started with using the shell.

You will learn the basic format or structure of a shell command.

You can run a UNIX (or Linux or Mac OS X) command (also called a tool) by typing its name and then the ENTER or RETURN key.

All commands (and file names) are **case sensitive**. `ls` is a valid command, while `LS` is unrecognized.

commands and utilities

A quick note on the difference between commands and utilities.

A **utility** is a program. `who`, `date`, and `ls` are examples of utility programs.

A **command** is all of the text typed at the command line, the utility name and all of the flags, switches, file names, and other text.

This subtle distinction between utilities and commands is generally ignored and the two terms are often used interchangeably. As I type this, I am pretty sure that I have ignored this distinction elsewhere in this book and dread double-checking every use.

You can probably use the terms interchangeably except in cases like tests, papers, or books.

The kernel is loaded from hard drive (or other storage) when the computer is started and remains running until the computer is turned-off or crashes.

Utilities are also stored on hard drives, but are only loaded into main memory when used.

single command

The most simple form of a UNIX command is just a single command by itself. Many UNIX/Linux commands will do useful work with just the command by itself. The next examples show two commands (`who` and `date`) by themselves.

The output generated by a single command by itself is called the default behavior of that command.

who

The `who` command will tell you all of the users who are currently logged into a computer. This is not particularly informative on a personal computer where you are the only person using the computer, but it can be useful on a server or a large computing system.

Type `who` followed by the ENTER or RETURN key.

```
$ who
admin      console Aug 24 18:47
admin      ttys000  Aug 24 20:09
$
```

The format is the login name of the user, followed by the user's terminal port, followed by the month, day, and time of login.

failed command

The shell will let you know when you have typed something it doesn't understand.

Type "`asdf`" and then the ENTER or RETURN key. You should see a message similar to the following:

```
$ asdf
-bash: asdf: command not found
$
```

date

The following example uses the **date** command or tool.

```
$ date
Wed Nov 10 18:08:33 PST 2010
$
```

The format is: day of the week, month, day of the month, 24 hour time, time zone, year.

options, switches, or flags

A command may optionally be followed by one or more options. The options are also commonly called flags or switches.

Options are usually a single character. Usually the option is preceded by a minus sign or hyphen character.

See the following example.

universal time

Adding the `-u` flag to the command `date` will cause it to report the time and date in UTC (Coordinated Universal) time (also known as Zulu Time and formerly known as Greenwich Mean Time or GMT). The seconds are slightly higher in the second example because of the passage of time.

```
$ date
Sat Aug 25 19:09:19 PDT 2012
$
$ date -u
Sun Aug 26 02:09:27 UTC 2012
$
```

option grouping

You can combine multiple options for a single command.

The following example shows the `ls` command by itself and with two options, first individually, and then combined.

```
$ date
```

```
Sat Aug 25 19:09:19 PDT 2012
$
$ date -u
Sun Aug 26 02:09:27 UTC 2012
$
```

option grouping

You can combine multiple options for a single command.

The following example shows the `ls` command by itself and with two options, first individually, and then combined.

```
$ ls
Desktop      Downloads    Movies      Pictures    scripts
Documents    Library      Music       Public

$ ls -F
Desktop/     Downloads/   Movies/     Pictures/   scripts/
Documents/   Library/     Music/      Public/

$ ls -a
.             .cups        Library      scripts
..            .vminfo      Movies
.DS_Store    Desktop      Music
.Trash        Documents    Pictures
-bash_history Downloads     Public

$ ls -a -F
./            .cups/       Library/     scripts
../           .vminfo      Movies/
.DS_Store     Desktop/     Music/
.Trash/       Documents/   Pictures/
-bash_history Downloads/    Public/
$
```

You can group option by listing them in any order (with a few rare exceptions) and either with their own minus sign or after a single minus sign. All of the following versions of the `ls` command work the same way:

```
$ ls -a -F
$ ls -F -a
$ ls -aF
$ ls -Fa
$
```

arguments

Commands may also optionally have arguments. The most common arguments are the names of files.

Technically, the options just mentioned are also arguments, but in common practice options are separated from other arguments in discussions. Also, technically, the operators mentioned below are also arguments, but again it is useful to separate operators from other arguments in discussions.

The following shows the difference between the default behavior (no arguments) of `who` and a version with arguments `who am i`.

The default behavior of `who` lists all users on the computer.

```
$ who
admin    console Aug 24 18:47
admin    ttys000 Aug 24 20:09
$
```

The use of the arguments with `who am i` causes the command to only lists the one user who typed the command.

The command is `who` and the arguments are `am i`.

```
$ who am i
admin    ttys000 Aug 25 17:30
$
```

one argument

In an [upcoming chapter on `cat`](#) you will use the command `cat` with the file name `file01.txt` to confirm that you correctly entered your sample file.

just observe this example
do *not* type this into your shell

```
$ cat file01.txt
This is a line of text in my first file.
This is another line.

To be, or not to be: that is the question:

1234567890
ABC
XYZ
abc
xyz
$
```

You may download this sample file from

<http://www.osdata.com/programming/shell/file01.txt>.

two arguments

In the [upcoming chapter on cat](#) you will use the command `cat` with two file names (`file01.txt` and `numberfile.txt`) to confirm that you correctly entered two of your sample files.

just observe this example
do *not* type this into your shell

```
$ cat file01.txt numberfile.txt
This is a line of text in my first file.
This is another line.

To be, or not to be: that is the question:

1234567890
ABC
XYZ
abc
xyz
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
$
```

You may download the second sample file from
<http://www.osdata.com/programming/shell/numberfile.txt>.

options and arguments

You can combine options and arguments on the same command line.

The following example uses the command `cat` with the `-b` option and the file name `file01.txt`.

just observe this example
do *not* type this into your shell

```
$ cat -b file01.txt
 1 This is a line of text in my first
file.
 2 This is another line.

 3 To be, or not to be: that is the
question:

 4 1234567890
 5 ABC
 6 XYZ
 7 abc
 8 xyz
$
```

operators and special characters

Command lines may include optional operators or other special characters.

In an [upcoming chapter on cat](#) you will use the command `cat` with the operator `>` and the file name `file01.txt` to enter your sample file.

just observe this example
do *not* type this into your shell

```
$ cat > file01
```

If you accidentally typed in the above command, hold down the CONTROL key and the D key at the same time to return to your shell.

quick tour of shell commands

chapter 10

summary

This chapter gives you a quick tour of shell commands.

You should do each of the exercises and observe what happens.

Do not worry about trying to learn how each of the commands works.

The goal here is to give you a basic idea of how a shell works and the kinds of things that the most common shell commands and operations do.

This quick tour will give you a background to understand the upcoming chapters and their lessons. If you have the need to use anything you observe in this quick tour, you can always jump ahead to the appropriate chapter and learn the details.

failure

Type `asdf` (a non-existent command) into the terminal. Remember to press the

ENTER or RETURN key after this command.

```
$ asdf
-bash: asdf: command not found
$
```

This shows you what it look like when the shell reports mistakes. Note that you will not always see any reports of a particular error. Commands that have no output will just return silently to the prompt.

echo text

Use the `echo` command to send text to the terminal. Remember to press the ENTER or RETURN key after each command. Note that this will be particularly useful in your future UNIX/Linux scripts to report information back from your scripts.

```
$ echo hello world
hello world
$
```

echo text with variable information

Use the `echo` command with an environment variable. it should use your account name.

```
$ echo hello $USER
hello admin
$
```

list director contents

Use the `ls` command to list the contents of the current directory. (Note that your results will be different.)

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures
Library      Public
$
```

create a text file

Use the `cat` command to create a small text file.

Type the command line, followed by RETURN or ENTER, then type each of the six suggested lines, each followed by the RETURN KEY. After having entered each line, make sure you are at the beginning of a new (blank or empty) line and type Ctrl-D (hold down the CONTROL key and the D key at the same time).

```
$ cat > names
James
Mary
John
Patricia
Robert
Linda
CONTROL-D
$
```

The choice of names is based on the most popular names in the United States in the year before this chapter was written. Bribe me if you want your name put into the example.

check the file was created

Use `ls` to make sure the file was created properly. It should be added to your directory listing.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library      Public
$
```

display file contents

Use the `cat` command to show the contents of your new file.

```
$ cat names
James
Mary
John
Patricia
Robert
Linda
$
```

count the number of words

Use the `wc` command to count the number of words in your new file.

```
$ wc names
      6      6     38 names
$
```

The format is the number of lines (6), followed by the number of words (6), followed by the number of characters (38), followed by the name of the file (`names`).

copy a file

Use the `cp` command to make a copy of a file.

```
$ cp names saved_names
$
```

Notice that there is no confirmation of the file copy being made.

This silent behavior is typical of any UNIX shell. The shell will typically report errors, but remain silent on success. While disconcerting to those new to UNIX or Linux, you become accustomed to it. The original purpose was to save paper. When UNIX was first created, the terminals were mostly teletype machines and all output was printed to a roll of paper. It made sense to conserve on paper use to keep costs down.

You can use the `ls` command to confirm that the copy really was made. You won't be using up any paper.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library      Public      saved_names
$
```

rename a file

Use the `mv` command to rename a file.

```
$ mv saved_names old_names
$
```

Notice that the shell is once again silent with success. You can use the `ls` command to confirm that the rename really was made.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library      Public      old_names
$
```

delete a file

Use the `rm` (remove) command to delete a file.

```
$ rm old_names
$
```

You can use the `ls` command to confirm that the file was really deleted.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library
$
```

current directory

Use the `pwd` command to determine the current directory. Your version should give the name of your home directory, which normally matches the name of your user account. The example include the directory as part of the prompt (your system may not include this) and the tilde (`~`) character indicates the home directory.

```
$ pwd
/Users/admin
admins-power-mac-g5:~ admin$
```

make a directory

Use the `mkdir` command to make a new directory (folder).

```
$ mkdir testdir
admins-power-mac-g5:~ admin$
```

change directory

Use the `cd` command to change to your new directory (folder). if your prompt includes the current directory, then you will see your prompt change to show the new location.

```
$ cd testdir  
admins-power-mac-g5:testdir admin$
```

confirm directory change

Use the `pwd` command to confirm that you are now in your new directory.

```
$ pwd  
/Users/admin/testdir  
admins-power-mac-g5:testdir admin$
```

return to home directory

Use the `cd` command without any additional arguments to return to your home directory from anywhere.

```
$ cd  
admins-power-mac-g5:~ admin$
```

confirm directory change

Use the `pwd` command to confirm that you are now back in your home directory.

```
$ pwd  
/Users/admin  
admins-power-mac-g5:~ admin$
```

Now you are ready to dive in and start becoming proficient at using the UNIX or Linux shell.

man

chapter 11

summary

This chapter looks at `man`, a Unix (and Linux) command.

`man` is the Unix equivalent of a help function.

`man` is the command used to view manual pages.

This chapter show you how to use the `man` command to get help. Because of huge variation in the various flavors of Unix and Linux, the `man` installed on your computer or server is the best source of detailed information. If you have trouble with any of the lessons in this book or in general use of your Unix or Linux system, always refer to the local `man` for help.

Unix was the first operating system distributed with online documentation. This included `man` (manual pages for each command, library component, system call, header file, etc.) and `doc` (longer documents detailing major subsystems, such as the `C programming language` and `troff`).

example of man command with options

Most BASH commands accept options. These options follow a space character and are typed before you press RETURN or ENTER.

The format is `man` is followed by the name of the command or tool that you want to view. You will get the manual pages for the named command or tool.

The following example uses the manual page for the **date** command or tool.

```
$ man date
DATE (1)          BSD General Commands
Manual            DATE (1)
```



```

NAME
    date -- display or set date and time

SYNOPSIS
    date [-ju] [-r seconds] [-v [+|-]val[ymwdHMS]] ... [+output_fmt]
    date [-jnu] [[mm]dd]HH]MM[cc]yy][.ss]
    date [-jnu] -f input_fmt new_date [+output_fmt]
    date [-d dst] [-t minutes_west]

DESCRIPTION
    When invoked without arguments, the date utility displays the
    current
    date and time. Otherwise, depending on the options specified,
date will
    set the date and time or print it in a user-defined way.

    The date utility displays the date and time read from the kernel
    clock.
    When used to set the date and time, both the kernel clock and
    the hard-
    ware clock are updated.

    Only the superuser may set the date, and if the system
    securelevel (see
    securelevel(8)) is greater than 1, the time may not be changed
    by more
    than 1 second.
    :

```

Typing the RETURN or ENTER key will bring up the next line of the manual page.

Typing the SPACE-BAR key will bring up the next page of text.

Typing the UP-ARROW or DOWN-ARROW key will move up or down one line.

Typing **q** will end viewing the manual page and return to the BASH prompt (the entire manual page will disappear from view).

The **man** command or tool will be a very useful reference.

A man page is typically organized:

NAME : Command name and brief description.

SYNOPSIS : The syntax for using the command, along with the flags (options) the command takes.

DESCRIPTION : Details about the command.

ENVIRONMENT : The environment variables used by the command.

EXIT STATUS : Information about how the command reports errors or success.

FILES : File related to the command.

SEE ALSO : related commands.

STANDARDS : The international standards, if any.

Some systems might have an **AUTHOR** or other sections.

Type `man man` for information about the local version of `man`.

man sections

The first seven distributions of Unix (called V1 UNIX through V7 UNIX and collectively called traditional Unix) included a two volume printed manual, which was divided into eight sections.

Some manual pages are located in sections. There are generally eight sections:

1. General commands
2. System [kernel] calls
3. C library functions
4. Special files (such as devices) and drivers
5. File formats, conventions, and miscellaneous information
6. games and screensavers
7. Macro packages
8. System administration commands and daemons

Note that on some systems, the system administration commands are in section 1m. This section is also sometimes called the Maintenance commands.

Note that on some systems, section 7 is Miscellaneous.

You can look at a particular section by adding the section number to the command line.

```
$ man SECTION-NUMBER commandname
```

You can use the `whatis` command to find the sections and then look at the particular section of your choice.

```
$ whatis crontab
crontab(1)          - maintain crontab files for individual
users (V3)
crontab(5)          - tables for driving cron

$ man 5 crontab
```

-f option

The `-f` option is used to show all `man` page titles for entries that begin with a particular word. `man -f file` will show all the manual pages that have the word “file” in the title.

```
$ man file
```

-k option

The `-k` option runs a search on all manual pages for any manual page with a particular word anywhere on the page. The `man -k file` will show all the manual pages that have the word “file” anywhere in the manual page. The `-k` option can take a while to run.

```
$ man file
```

other

On November 8, 2010, Ramesh Natarajan named this the number 41 most frequently used Unix/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

A man page (short for manual page) is a form of software documentation usually found on a Unix or Unix-like operating system. Topics covered include computer programs (including library and system calls), formal standards and conventions, and even abstract concepts. A user may invoke a man page by issuing the `man` command. —[Wikipedia man page](#)

cat

chapter 12

summary

This chapter looks at `cat`, a UNIX (and Linux) command.

The `cat` (as in **concatenate**) utility can be used to concatenate several files into a single file.

`cat` is most often used to obtain the contents of a file for input into a Linux or UNIX shell script.

`cat` was part of the original 1969 version of UNICS (the original name for UNIX).

create names file

If you did not create the names file suggested in the [quick tour chapter](#), please do so now, because you will use this file in future exercises. If you already created the names file, then you can safely skip this step and go to the main body of instruction for this chapter.

Type the command line, followed by RETURN or ENTER, then type each of the six suggested lines, each followed by the RETURN KEY. After having entered each line, make sure you are at the beginning of a new (blank or empty) line and type Ctrl-D (hold down the CONTROL key and the D key at the same time).

```
$ cat > names
James
Mary
John
Patricia
Robert
Linda
CONTROL-D
$
```

The choice of names is based on the most popular names in the United States in the year before this chapter was written. Bribe me if you want your name put into the example.

check the file was created

Use `ls` to make sure the file was created properly. It should be added to your directory listing.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library      Public
$
```

display file contents

Use the `cat` command to show the contents of your new file.

```
$ cat names
James
Mary
John
Patricia
Robert
Linda
$
```

creating files

One simple use of `cat` is to create simple files.

Type `cat > file01`, followed by ENTER or RETURN.

```
$ cat > file01
```

The cursor will be at the beginning of a line that has no prompt. You are no longer in the shell, but instead in the `cat` utility. There is no `cat` prompt.

Type the following lines (by convention, all of the input should be in bold, but to make it easier on the eye, it is in italics here):

```
This is a line of text in my first file.
This is another line.
```

```
To be, or not to be: that is the question:

1234567890
ABC
XYZ
abc
xyz
```

Once you have typed in these lines, press RETURN to make sure you are at the beginning of a new line.

Press Ctrl-D (hold down the CONTROL key and the D key at the same time). This indicates end-of-file (EOF), which informs `cat` that you have no more input. This will return you to the shell.

Note that unlike some operating systems, the “.txt” file extension is *not* required by UNIX or Linux. It is optional, but the file extensions are often used to make it easier for a human to distinguish file types.

Now repeat the process with the following file (by convention, all of the input should be in bold, but to make it easier on the eye, it is in italics here):

There is a lot of typing in this example, but it is important for the upcoming exercises. Type the following lines (by convention, all of the input should be in bold, but to make it easier on the eye, it is in italics here):

Because of the length of this file, you may want to download a copy from the internet. There is a copy at <http://www.osdata.com/programming/shell/file02.txt> — if you know how to download a copy and place it in your home directory, save yourself some typing time.

```
$ cat > file02.txt

This is a line of text in my second file.
This is another line.

To be, or not to be: that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles,
And by opposing end them? To die: to sleep;
No more; and by a sleep to say we end
The heart-ache and the thousand natural shocks
That flesh is heir to, 'tis a consummation
Devoutly to be wish'd. To die, to sleep;
To sleep: perchance to dream: ay, there's the rub;
For in that sleep of death what dreams may come
When we have shuffled off this mortal coil,
Must give us pause: there's the respect
That makes calamity of so long life;
```

*For who would bear the whips and scorns of time,
 The oppressor's wrong, the proud man's contumely,
 The pangs of despised love, the law's delay,
 The insolence of office and the spurns
 That patient merit of the unworthy takes,
 When he himself might his quietus make
 With a bare bodkin? who would fardels bear,
 To grunt and sweat under a weary life,
 But that the dread of something after death,
 The undiscover'd country from whose bourn
 No traveller returns, puzzles the will
 And makes us rather bear those ills we have
 Than fly to others that we know not of?
 Thus conscience does make cowards of us all;
 And thus the native hue of resolution
 Is sicklied o'er with the pale cast of thought,
 And enterprises of great pith and moment
 With this regard their currents turn awry,
 And lose the name of action. - Soft you now!
 The fair Ophelia! Nymph, in thy orisons
 Be all my sins remember'd.*

1234567890
 ABC
 XYZ
 abc
 xyz

Now repeat the process with the following file (by convention, all of the input should be in bold, but to make it easier on the eye, it is in italics here — note the cheat method below):

```
$ cat > numberfile
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
```

Once again, use the RETURN key to enter a new line and then use Ctrl-D to exit

`cat`.

If you want to cheat on making this file, you can use the following command on Mac OS X or BSD systems:

```
$ jot 20 1 > numberfile.txt
$
```

You will use these files in many of the exercises in this book.

PC-DOS equivalent

`cat` is the UNIX equivalent of the MS-DOS or PC-DOS command `TYPE`. You can add the PC-DOS equivalent to your shell session with the `alias` command. To make the change permanent, add the following line to the `.bashrc` file in your home directory. Note that if you add this PC-DOS/MS-DOS equivalent, only add the all upper case version, because the lower case `type` is an important UNIX command that you will also need.

```
$ alias TYPE="cat"
```

view a file with `cat`

Type `cat file 01`, followed by the RETURN or ENTER key. You should see the contents of your first file. The beginning of the file may scroll off the top of your screen (this is normal).

```
$ cat file01
This is a line of text in my first file.
This is another line.

To be, or not to be: that is the question:

1234567890
ABC
XYZ
abc
xyz
$
```

combine files with `cat`

Type `cat file 02 numberfile`, followed by the RETURN or ENTER key. This will show you the contents of both files, one immediately after the other. This is

the use for which `cat` was named.

```
$ cat file02 numberfile
This is a line of text in my second file.
This is another line.

To be, or not to be: that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles,
And by opposing end them? To die: to sleep;
No more; and by a sleep to say we end
The heart-ache and the thousand natural shocks
That flesh is heir to, 'tis a consummation
Devoutly to be wish'd. To die, to sleep;
    ...many text lines...
The fair Ophelia! Nymph, in thy orisons
Be all my sins remember'd.

1234567890
ABC
XYZ
abc
xyz
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
$
```

This should list your new file that combines combines two of the files you created. The beginning of the listing will scroll off the top of your screen. Don't worry about it. We'll see how to view long files in the chapter about `less` ([less, more, pg](#)).

display with line numbers

The following example uses the command `cat` with the `-n` option to add line numbers to the listing of the file.

Type `cat -n file01.txt`.

```
$ cat -n file01.txt
 1 This is a line of text in my first file.
 2 This is another line.

 3 To be, or not to be: that is the question:
 4
 5 1234567890
 6 ABC
 7 XYZ
 8 abc
 9 xyz
$
```

Notice that the blank line is numbered. You can use the `-b` option to get line numbers, skipping all blank lines.

Type `cat -b file01.txt`.

```
$ cat -b file01.txt
 1 This is a line of text in my first file.
 2 This is another line.

 3 To be, or not to be: that is the question:

 4 1234567890
 5 ABC
 6 XYZ
 7 abc
 8 xyz
$
```

empty a file

You can use `cat` to empty a file by sending `/dev/null` to the file to be emptied. The null device is bit nothingness.

Start by making a copy of one of the files you just created so that you don't wipe out your hard work.

```
$ cp file01.txt emptyfile
$
```

Use `cat` to verify that the new file really does exist and has a complete copy of the original file.

```
$ cat emptyfile.txt
This is a line of text in my first file.
This is another line.
```

```
To be, or not to be: that is the question:

1234567890
ABC
XYZ
abc
xyz
$
```

Now type `cat /dev/null > emptyfile.txt`. This will leave the file in existence, but empty it of all characters.

```
$ cat /dev/null > emptyfile.txt
$
```

Confirm this by using both `cat` and `wc` (word count). The `cat` will simply return to the prompt because there is nothing to print out. The `wc` will show zero lines, zero words, and zero characters.

```
$ cat file01.txt > emptyfile.txt
$ wc names
      0      0      0 emptyfile.txt
$
```

replacing files

The previous example brings up the point that if you use `cat` to output to an existing file, the previous file will be completely replaced by the new one. There is no warning at all.

appending files

You can append to the end of an existing file by using two greater than signs (no spaces in between) `>>`.

Start by making a copy of an existing file and then confirming the copy is correct.

```
$ cp file01.txt file03.txt
$ cat file03.txt
This is a line of text in my first file.
This is another line.

To be, or not to be: that is the question:

1234567890
ABC
```

```
XYZ
abc
xyz
$
```

Now try the append.

```
$ cat numberfile.txt >>.file03.txt
$
```

And confirm that your append worked.

```
$ cat file03.txt
This is a line of text in my first file.
This is another line.

To be, or not to be: that is the question:

1234567890
ABC
XYZ
abc
xyz
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
$
```

hidden characters and spaces

There are several switches that can be used to view files with non-printable characters, trailing spaces, and other hidden characters that can drive you crazy.

On Linux (*not* on BSD or SYS V or Mac OS X), you can use the `-E` command to place a `$` dollar sign at the end of each line. This will reveal trailing spaces that would

not otherwise be visible.

```
$ cat -E names
James$
Mary$
John$
Patricia$
Robert$
Linda$
$
```

The `-v` switch will display non-printing characters. Control characters are preceded by the `^` caret character, so control-X would be listed as `^X`. The delete character (octal 0177) is displayed as `^?`. The non-ASCII characters (high bit set) are displayed with `M-` (for meta) followed by the character for the low seven bits.

On Linux only, you can combine the `-vE` with the `-e` character (show nonprinting characters and the end of line marker).

On Linux only, you can use the `-T` switch to show tab characters as `^I`.

You can use the `-t` switch to show tab characters as `^I` and non-printing characters in the manner described for the `-v` switch. This is the equivalent of the Linux only `-vT`.

On Linux only, you can use the `-A` switch as a shorter version of the `^vET` combination.

squeeze lines

You can use the `-s` switch to suppress multiple consecutive empty lines. Only one empty line will be displayed.

cat in scripts

While `cat` is a great tool for work from the command line, if you find yourself using `cat` in a script, you should probably rethink your algorithm. It is rare that you are on the right path when you find yourself using `cat` inside a shell script. The use of `cat` in a shell script is a common sign of amateur hacking and the script probably has additional serious beginner mistakes and problems as well.

`cat` can correctly be used in a script, but if you find yourself using `cat` in a script, you might want to stop and think about it. See if you can find a better solution.

other

On November 8, 2010, Ramesh Natarajan named this the number 30 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

`cat` is a standard Unix utility that reads files sequentially, writing them to standard output. The name is derived from its function to (con)catenate files (from Latin *catenare*, “to chain”). It has been ported to a number of operating systems.

—[Wikipedia cat page](#)

command separator

chapter 13

summary

This chapter looks at the command separator in UNIX or Linux.

semicolon

The semicolon (;) is used as a command separator.

You can run more than one command on a single line by using the command separator, placing the semicolon between each command.

```
$ date; who am i
Mon Aug 27 19:15:41 PDT 2012
admin    ttys000  Aug 27 17:50
$
```

It does not matter if you have a space before the semicolon or not. Use whichever method is more readable and natural for you.

```
$ date ; who am i
Mon Aug 27 19:15:41 PDT 2012
admin    ttys000  Aug 27 17:50
$
```

Each command is processed in order, as if you had typed each individually, with the exception that the line with the prompt is only displayed once, at the end of the series of commands.

If you forget the semicolon, you will get an error message. The following two examples are from different systems.

```
$ date who am i
date: illegal time format
$
```

```
$ date who am i
date: bad conversion
$
```

The semicolon is a common terminator or separator in many common programming languages, including Ada, C, Java, Pascal, Perl, PHP, and PL/I.

Many programmers automatically place the semicolon at the end of any shell command. The shell is fine with this.

```
$ date;
Mon Aug 27 19:15:41 PDT 2012
$
```

less, more, pg

chapter 14

summary

This chapter looks at `less`, `more`, and `pg`, a related family of UNIX (and Linux) commands.

`less`, `more`, and `pg` are utilities for reading a very large text file in small sections at a time.

`pg` is the name of the historical utility on BSD UNIX systems.

`more` is the name of the historical utility on System V UNIX systems.

`pg` and `more` are very similar and have almost the same functionality and are used in almost the exact same manner, except for whether you type `pg` or `more`.

`less` is a more modern version that has the capabilities of `more` along with additional new capabilities.

Mac OS X has all three versions installed. It is common to find both `more` and `less` on Linux systems. The older versions are typically included so that old scripts written before the invention of `less` will still work.

The name `less` is a pun, from the expression “less is more.”

Try using `less` with your test file `file01.txt`.

You are going to try `less` first. Which of the three commands work for you depends on which ones are installed.

```
$ less file01.txt
```

Next, you are going to try `more` next.

```
$ more file01.txt
```

And finally, you are going to try `pg` last.

```
$ pg file01.txt
```

At least one of the three will work. Please try the others to see if they are available on your system, but for this exercise, use `less` if it works, otherwise use the first one that works.

```
$ less file01.txt
This is a line of text in my first file.
This is another line.

To be, or not to be: that is the question:

1234567890
ABC
XYZ
abc
xyz
$
```

Now we are going to see the real power of `less` with a long file.

```
$ less file02.txt
This is a line of text in my second file.
This is another line.

To be, or not to be: that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles,
And by opposing end them? To die: to sleep;
No more; and by a sleep to say we end
The heart-ache and the thousand natural shocks
That flesh is heir to, 'tis a consummation
Devoutly to be wish'd. To die, to sleep;
To sleep: perchance to dream: ay, there's the rub;
For in that sleep of death what dreams may come
When we have shuffled off this mortal coil,
Must give us pause: there's the respect
That makes calamity of so long life;
For who would bear the whips and scorns of time,
The oppressor's wrong, the proud man's contumely,
The pangs of despised love, the law's delay,
The insolence of office and the spurns
That patient merit of the unworthy takes,
When he himself might his quietus make
File02.txt
```

Notice that you are not yet back to the shell prompt. You are still in the `less` command. You are only one page into the file. `less` allows you to view long files one page at a time, instead of scrolling them off the top of your screen.

Type the `SPACE` key to see another page of text.

```
That patient merit of the unworthy takes,  
When he himself might his quietus make  
With a bare bodkin? who would fardels bear,  
To grunt and sweat under a weary life,  
But that the dread of something after death,  
The undiscover'd country from whose bourn  
No traveller returns, puzzles the will  
And makes us rather bear those ills we have  
Than fly to others that we know not of?  
Thus conscience does make cowards of us all;  
And thus the native hue of resolution  
Is sicklied o'er with the pale cast of thought,  
And enterprises of great pith and moment  
With this regard their currents turn awry,  
And lose the name of action. - Soft you now!  
The fair Ophelia! Nymph, in thy orisons  
Be all my sins remember'd.
```

```
1234567890  
ABC  
XYZ  
abc  
xyz  
(END)
```

Notice that you are not yet back to the shell prompt. Even though the entire file contents have been listed, you are still in the `less` command.

Typing lower case `q` will quit the `less` (or `more` or `pg`) program.

`less` (and the other two utility commands) displays one page at a time. This is in contrast with `cat`, which displays the entire file at once.

other

On November 8, 2010, Ramesh Natarajan named this the number 43 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

file system basics

chapter 15

summary

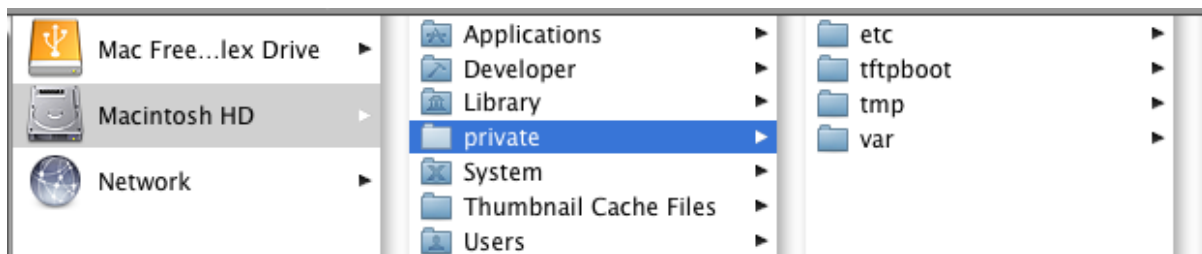
This chapter looks at the basics of the file system on UNIX or Linux.

By 1971, many fundamentally important aspects of UNIX were already in place, including file ownership and file access permissions.

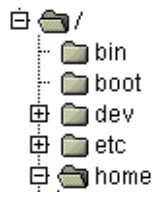
graphics exmample

In a graphic user interface, you can see the file system directory structure in some kind of picture version. This varies by system.

The following example is from Mac OS X. If you use Mac OS X, the UNIX directories are kept hidden in Finder. You can see them by using Finder's **Go** menu, Go To Folder..., and type "private".



The following example is from Linux.



Do **not** mess with your system files until you know what you are doing. You can cause your computer to stop working.

Some of the typical UNIX/Linux directories are etc, tmp, var, bin,/sbin, dev, boot, or home.

some basics

Both UNIX and Linux organize the entire file system into a single collection (called the directory tree). This is in sharp contrast to Windows dividing the file system into multiple parts, each based on a particular drive or device.

File names are case sensitive. The file names “File” and “file” are different files. This is in sharp contrast with Windows and Macintosh (where they are alternate names for the same file). Note that this is a Mac OS X variation from the standard UNIX practice.

A file name that starts with a period is a hidden file. In Mac OS X, you can toggle between showing and hiding hidden files in Finder by typing Command-Shift-Period.

Neither UNIX nor Linux enforce or recognize file extensions (such as “.txt”). In some operating systems (such as Windows and traditional Macintosh), the file extensions are recognized by the operating system and are used for such purposes as deciding which program is used to open the file. You can add file extensions UNIX or Linux file names (and this is commonly done to help humans organize their files), but the file extension is ignored by the operating system and has no special meaning.

Most modern Linux and UNIX operating systems support long file names with a wide variety of characters, including the space character. Shells are set up for old school UNIX, which had a limited number of characters in file names and a very limited choice of characters in file names. It is best to use these old school limits for files you manipulate through the UNIX or Linux shell. Mac OS X allows you to put file names inside quotation marks (to allow such things as spaces in file names). You can also access files through their inode numbers (which will let the shell work on any file name). Still, it is wise to use only letters, numbers, period, hyphen, and underscore in UNIX or Linux file names (and particularly to avoid the space character).

directory tree

A directory in UNIX or Linux is the same as a folder in Macintosh or Windows.

Directories may contain any combination of files and subordinate directories.

This structure is called a tree. It branches out from a root.

The **root** is the beginning of the filesystem.

A **branch** is a directory and all of its subdirectories.

When a directory is inside another directory, the one inside is called a **child** and the outer one is the **parent**.

A **leaf** is anything that has no children, such as a file.

Unix and Linux are organized into a single file system tree, under a master directory called root and designated by the forward leaning slash (/). This is in sharp contrast with Windows, where there is a separate file system tree for each drive letter.

In UNIX, everything is is a file. Even a directory is just a special file that stores information about other files.

some important directories

The following is a brief description of some of the major directories. Not all systems will have all of these directories.

/ The root directory of the entire file system.

/bin A collection of binary files, better known as programs.

/boot or **/kernel** The files needed to boot or start your computer.

/dev The devices connected to your computer (remember, everything, even hardware devices, is treated as a file in UNIX or Linux).

/etc System configuration files, startup procedures, and shutdown procedures.

/home or **/users** The home directories for each user.

/lib or **/Library** Library files.

/net Other networked systems (again, treated as files).

/opt Third party software. In older systems this might be **/usr/local**

/private On Mac OS X, this is the location of the UNIX files. It is normally kept

hidden from all users in Finder, but is visible in your terminal emulator and shell. Mac OS X has links to the major UNIX directories at the root level so that UNIX and Linux tools can find their files in the standard locations.

/proc Information about processes and devices.

/sbin System binaries (that is, system programs).

/tmp Space for temporary files. Required by all forms of UNIX.

/usr User binaries (programs), libraries, manuals, and docs.

/var Variable files.

Swap Virtual memory on a hard drive. Allows the memory manager to swap some data and program segments to hard drive to expand the amount of memory available beyond the limits of physical memory.

For a more advanced and complete listing, see [major directories](#).

home and working directory

The home directory is the directory that your system places you in when you first log into your system (start the shell). The home directory is defined in the `/etc/passwd` file. This is your personal space on a UNIX or Linux machine.

The tilde character can be used to name your home directory. `~user-name` (where user-name is your actual user name) indicates your home directory.

The working directory is whatever directory you happen to be working in. The working directory is always the same as the home directory when you start a shell session, but you can change your working directory at any time (and typically do change it). Commands normally are applied to the current working directory.

The working directory may also be called the current directory, current working directory, or present working directory.

parent and child directory

Any directories underneath a particular directory are called child directories. Any directory can have zero, one, or many child directories.

The directory above any particular directory is called the parent directory. Any directory has only one parent (with the exception of root, which has no parent).

absolute paths

Every directory or file can be defined by a complete absolute path. The complete absolute path gives every level of directory, starting from the root. An absolute path name is sometimes called the full path name.

An example might be the `/usr/java/bin`. This would be a directory containing Java binaries. In this example, under the `/` root directory there is a directory called `usr` and inside that directory there is a directory called `java` and inside that directory there is a directory called `bin` and inside that directory there are programs for running Java.

Absolute paths normally start at the root of the file system.

relative paths

Relative paths describe where to find a file or directory from the current working directory.

A single period (or dot) character (`./`) indicates that you are describing the path to a directory or file from the current working directory.

If your current working directory is `www` and that directory is under `/usr`, then the file `index.html` inside the current working directory can be described by the full or absolute path of `/usr/www/index.html` or a relative path name of `./index.html`.

The single period is called “dot”.

Two periods (`../` called “dot dot”) take you up one directory to the parent directory.

You can use a series of two dots (`../..`) to go up more than one directory level.

dots and tildes and slashes

`/` Slash is used as a separator between directory names. When slash is the first character in a path name, it indicates the root directory.

`~` Tilde is used to get to your home directory.

`./` Single dot is used to indicate the current working directory.

`../` Two dots are used to indicate the parent of the current working directory.

`.` A single dot in front of a file name (such as `.Trash`) is used to make a hidden

file. Hidden files are only listed when specifically requested.

hidden files

A file name that starts with a period is a hidden file. In Mac OS X, you can toggle between showing and hiding hidden files in Finder by typing Command-Shift-Period. In MS-DOS, a hidden file can't be written to. In UNIX and Linux a hidden file can be read and written.

Some important hidden files are the files used to configure the working environment, including `.cshrc`, `.login`, and `.profile`.

Some programs keep application-specific resources in hidden files or hidden directories.

moving around

This will all make a bit more sense in the next chapter as you learn how to actually move around your file system.

pwd

chapter 16

summary

This chapter looks at `pwd`, a UNIX (and Linux) command.

`pwd` is used to Print the Working Directory. It provides the full path for the current working directory. and is normally run without any options.

`pwd` is a builtin command in `bash`. There is also an external utility with the same name and functionality.

working directory

The working directory is whatever directory you happen to be working in. The working directory is always the same as the home directory when you start a shell session, but you can change your working directory at any time (and typically do change it). Commands normally are applied to the current working directory.

The working directory may also be called the current directory, current working directory, or present working directory.

using pwd

Type `pwd` from the command line, followed by ENTER or RETURN, and you will see the current working directory.

```
$ pwd
/Users/admin
$
```

There's not much else to tell you about this command, but this is an important one because you will continually have the need to know where you are.

moving around

We will go into more detail about these commands later, but for now you need to know how to move around in your file system.

The `ls` command is used to list the contents of the current directory.

Go ahead and type `ls` followed by ENTER or RETURN and you will see a list of the files and directories in your current working directory (which should still also be your home directory).

The `cd` command is used to change directories.

Go ahead and type `cd directory-name` followed by ENTER or RETURN and you will move to the new directory. You can confirm this by then typing `pwd` followed by ENTER or RETURN. You will see that you have successfully changed working directories.

This example includes a directory that may or may not exist on your machine, `cd Desktop`. Pick one of the directories listed on your machine.

```
$ pwd
/Users/admin
$ ls
Desktop      Movies      Send Registration
Documents    Music       Sites
Downloads    Pictures
Library      Public
$ cd Desktop
$ pwd
/Users/admin/Desktop
$
```

As you move around the directory tree, it is common to forget exactly where you are, especially if you do some other tasks (such as file editing). `pwd` provides an easy way to determine where you are and insure that your next actions are happening in the correct directory.

Use `cd` command all by itself to return to your home directory.

```
$ cd
$ pwd
/Users/admin
$
```

other

On November 8, 2010, Ramesh Natarajan named this the number 13 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

advanced topic

The remainder of this chapter covers an advanced topic. I am placing this here so that you will be easily able to find them when you are ready for this information.

Eventually you will make use of symlinks and symlinked directories. There will be times when you need to know the actual physical path to the current working directory, not just the logical symlinked path.

options

`pwd` is almost always used without options and never uses any arguments (such as file names). Anything other than legal options typed after `pwd` are ignored. Some shells ignore anything other than the legal options typed after `pwd` without reporting any errors, while most shells report errors for illegal options. All shells seem to ignore all arguments without reporting any errors.

The two main options for `pwd` are `-L` and `-P`.

The `-L` option displays the logical current working directory. This is the default if no options are listed.

```
$ cd /symlink
$ pwd -L
/symlink
$
```

The `-P` option displays the physical current working directory, with all symbolic links resolved.

```
$ pwd -P
/Users/admin
$
```

You can use the results of the `pwd -P` switch to `cd` to the physical directory.

```
$ cd /Users/admin
$
```


You can also use the `-P` switch directly on the `cd` command to change to the physical directory.

```
$ cd -P /symlink
$ pwd
/Users/admin
$
```

You can use the `help` command to get information about `pwd`.

```
$ help pwd
```

Some early Linux shells allow the `--help` command to get information about `pwd`.

```
$ pwd --help
```

Some early Linux shells allow the `--version` option gives the version number for your copy of `pwd`.

```
$ pwd --version
```

command history

chapter 17

summary

This chapter looks at command history in a UNIX (and Linux) BASH shell.

Command history is used to recall recent commands and repeat them with modifications.

You will find that you are often repeating a few common commands over and over with variations in the options and arguments (such as file names). Having the ability to recall a previous example and make a few changes will greatly save on typing.

arrow keys

Pushing the Up Arrow key will bring back previously typed commands one at a time (from most recently typed to the first typed).

Pushing the Down Arrow key will move from the oldest to the newest commands one at a time.

The commands brought back by the Up Arrow and Down Arrow keys will appear after the current prompt.

You can press the ENTER or RETURN key to immediately run any selected command.

After using the Up Arrow or Down Arrow keys, your cursor is at the end of the line. You can use the DELETE key to remove old arguments and then start typing in new ones.

Note that holding down the CONTROL key and pressing the p key at the same time will take you to the previous command just like the Up Arrow key. This is written ^p.

Holding down the CONTROL key and pressing the n key at the same time will take you to the next command just like the Down Arrow key. This is written ^n.

Pressing the META key (or on some systems pressing the ESCAPE key), then releasing it, then typing the less than < key will take you to the beginning of the command history. Pressing the META key (or on many modern systems pressing the ESCAPE key or ESC key), then releasing it, then typing the greater than > key will also move to the end (most recent) command history. These are written M-< and M->.

editing a line

As mentioned above, when you use command history, the cursor is at the end of the recalled command.

Either the Left Arrow or ^b (CONTROL-B) will go one character backward (towards the beginning of line).

Either the Right Arrow or ^f (CONTROL-F) will go one character forward (towards the end of line).

Typing inside a line will place characters in front of the cursor. The character inside the cursor remains unchanged.

Using the DELETE key will delete the character in front of the cursor. The character inside the cursor remains unchanged.

^k (CONTROL-K) will delete everything from the cursor to the end of the line.

^d (CONTROL-D) will delete the character inside (under) the cursor.

M-b will move you one word back (towards beginning of line). In this case, a word is a collection of characters, usually separated by a space character.

M-f will move you one word forward (towards end of line).

^e (CONTROL-E) will move to the end of the line and ^a (CONTROL-A) will move to the beginning of the line.

Once you have edited your command, use the RETURN or ENTER key to run the

new command. You can use the ENTER or RETURN key from anywhere in the command line. You do not have to be at the end of the command line.

built-in commands

chapter 18

summary

This chapter looks at built-in commands in a UNIX (and Linux) BASH shell.

tools

Most of the commands in the UNIX or Linux shell are actually programs. If you look at the `usr/bin` directory, you will see the actual programs. Most of these programs were written in the C programming language.

There is a common core of tools/commands that will be available on almost every UNIX or Linux machine, but exactly how many and which commands/tools are available varies widely.

The good news is that if a command or tool is missing from your system, you can go out and get the source code and recompile it for your local computer.

built-in

Many of the shells have special built-in commands. These are *not* separate programs, but are part of the code for the shell itself.

One example would be the shell command `cd` that you just saw in the previous [quick tour chapter](#).

There are some built-in commands are only available in selected shells and these can make your scripts shell-dependent.

Some examples of built-in commands include the `history` command in the C shell, and the `export` command in the Bourne shell. The `cd` command is built-in in both `bash` and `csch`.

`echo` is an example of a command that is built into both `bash` and `csch`, but also exists externally as a utility.

overriding built-in commands

You can override any built-in commands by giving the full path name to an external command or utility. If `bash` finds a slash character (`/`) anywhere in a command, the shell will not run the built-in command, even if the last component of the specified command matches the name of a builtin command.

As an example, using the command `echo` will run the version of the command that is built into `bash`, while specifying `/bin/echo` or `./echo` will ignore the built-in command and instead run the designated utility.

Overriding can be used to run alternative versions of commands or to extend the built-in command to add additional features.

determining builtin or external

You can use the `type` command to determine if a particular command is a built-in command or an external utility. If the command is an external utility, you will also be told the path to the external command.

```
$ type echo
echo is a shell builtin
$ type mkdir
mkdir is /bin/mkdir
$
```

You can use the `which` command to locate a program in your path.

```
$ which echo
/bin/echo
$
```

You can use the `whereis` command to locate a program in your path.

```
$ whereis echo
/bin/echo
$
```

In `cs`h and `tc`sh you can use the `where` command to locate a program in your path.

```
% where echo
/bin/echo
%
```

problems

You can use the `type` command to determine if a particular command is a built-in command or an external utility. If the command is an external utility, you will also be told the path to the external command.

If something bad happens to your computer, if the shell is still loaded in memory and running, any of the built-in commands will still work correctly, even if the entire file system (including all hard drives) disappears or becomes unavailable for any reason.

built in command chart

The following chart shows the built-in commands and external utilities for `bash` and `cs`h for Mac OS X. This will be similar for Linux and other UNIXes.

External commands marked `No**` under the External column do exist externally, but are implemented using the built-in command.

Command	External	cs	h	bash
!	No	No		Yes
%	No	Yes		No
.	No	No		Yes
:	No	Yes		Yes
{	No	No		Yes
}	No	No		Yes
alias	No**	Yes		Yes
alloc	No	Yes		No

bg	No**	Yes	Yes
bind	No	No	Yes
bindkey	No	Yes	No
break	No	Yes	Yes
breaksw	No	Yes	No
builtin	No	No	Yes
builtins	No	Yes	No
case	No	Yes	Yes
cd	No**	Yes	Yes
chdir	No	Yes	Yes
command	No**	No	Yes
complete	No	Yes	No
continue	No	Yes	Yes
default	No	Yes	No
dirs	No	Yes	No
do	No	No	Yes
done	No	No	Yes
echo	Yes	Yes	Yes
echotc	No	Yes	No
elif	No	No	Yes
else	No	Yes	Yes
end	No	Yes	No
endif	No	Yes	No
endsw	No	Yes	No
esac	No	No	Yes
eval	No	Yes	Yes
exec	No	Yes	Yes
exit	No	Yes	Yes
export	No	No	Yes

false	Yes	No	Yes
fc	No**	No	Yes
fg	No**	Yes	Yes
filetest	No	Yes	No
fi	No	No	Yes
for	No	No	Yes
foreach	No	Yes	No
getopts	No**	No	Yes
glob	No	Yes	No
goto	No	Yes	No
hash	No	No	Yes
hashstat	No	Yes	No
history	No	Yes	No
hup	No	Yes	No
if	No	Yes	Yes
jobid	No	No	Yes
jobs	No**	Yes	Yes
kill	Yes	Yes	No
limit	No	Yes	No
local	No	No	Yes
log	No	Yes	No
login	Yes	Yes	No
logout	No	Yes	No
ls-F	No	Yes	No
nice	Yes	Yes	No
nohup	Yes	Yes	No
notify	No	Yes	No
onintr	No	Yes	No
popd	No	Yes	No

printenv	Yes	Yes	No
pushd	No	Yes	No
pwd	Yes	No	Yes
read	No**	No	Yes
readonly	No	No	Yes
rehash	No	Yes	No
repeat	No	Yes	No
return	No	No	Yes
sched	No	Yes	No
set	No	Yes	Yes
setenv	No	Yes	No
settc	No	Yes	No
setty	No	Yes	No
setvar	No	No	Yes
shift	No	Yes	Yes
source	No	Yes	No
stop	No	Yes	No
suspend	No	Yes	No
switch	No	Yes	No
telltc	No	Yes	No
test	Yes	No	Yes
then	No	No	Yes
time	Yes	Yes	No
times	No	No	Yes
trap	No	No	Yes
true	Yes	No	Yes
type	No	No	Yes
ulimit	No	No	Yes
umask	No**	Yes	Yes

unalias	No**	Yes	Yes
uncomplete	No	Yes	No
unhash	No	Yes	No
unlimit	No	Yes	No
unset	No	Yes	Yes
unsetenv	No	Yes	No
until	No	No	Yes
wait	No**	Yes	Yes
where	No	Yes	No
which	Yes	Yes	No
while	No	Yes	Yes

ls

chapter 19

summary

This chapter looks at `ls`, a UNIX (and Linux) command.

`ls` is the UNIX (and Linux) list command.

The `ls` command was described in the first UNIX book, *UNIX Programmer's Manual*, by Ken Thompson and Dennis Ritchie, published November 3, 1971.

list directory contents

Use the `ls` command to list the contents of the current working directory (files and directories).

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures
Library      Public
$
```

PC-DOS equivalents

`ls -la` is the UNIX equivalent of the MS-DOS or PC-DOS command `DIR`. You can add the PC-DOS equivalent to your shell session with the `alias` command. To make the change permanent, add the following line to the `.bashrc` file in your home directory. Note that if you add this PC-DOS/MS-DOS equivalent, only add the all upper case version, because the lower case `type` is an important UNIX command that you will also need.

```
$ alias DIR="ls -la"
```

`ls -la` | `less` is the UNIX equivalent of the MS-DOS or PC-DOS command `DIR /P`.

list all

Type `ls` with the `-A` option to get a list of all entries other than `.` (single dot) and `..` (double dot).

```
$ ls -A
```

list with indicators

Type `ls` with the `-F` option to have special indicators for special files.

```
$ ls -F
Desktop/      Music/        file01.txt
Documents/    Pictures/     file02.txt
Downloads/    Public/       names
Library/      Send registration@ numberfile.txt
Movies/       Sites/        testdir/
$
```

A slash `/` will be added after every pathname that is a directory. An asterisk `*` will be added after every file that is executable (including scripts). An at sign `@` will be displayed after each symbolic link. An equals sign `=` will be displayed after each socket. A percent sign `%` will be displayed after each whiteout. A vertical bar `|` will be displayed after each item that is a FIFO.

`ls -F` is a builtin command in `csh`.

hidden files

The `-a` option will give a list of all files, including hidden files.

```
$ ls
Desktop      Downloads    Movies      Pictures    scripts
Documents    Library      Music       Public
$ ls -a
.            .cups        Library     scripts
..           .vminfo      Movies
.DS_Store    Desktop      Music
.Trash        Documents    Pictures
-bash_history Downloads    Public
$
```

The hidden or invisible files are hidden to make it less likely that they are

accidentally corrupted or deleted.

list specific directory

So far all of the examples have been on the current working directory. If you name a specific directory, you will get a listing for that directory. You may use any of the flags you have already learned.

```
$ ls Music
GarageBand      iTunes
$
```

common error

The most common error is attempting to `ls` a directory or file that doesn't exist.

multiple directories

You can list multiple directories, each separated by a space character. This will give the listing for each directory, one at a time.

```
$ ls Movies Music
Movies:
iMovie Projects.localized

Music:
GarageBand      iTunes
$
```

separate lines

The `-l` option will cause each item on its own line. This is useful for scripts that will do further processing.

```
$ ls -l
Desktop
Documents
Downloads
Library
Movies
Music
Pictures
Public
scripts
$
```


option grouping

You can combine multiple options for a single command. For example, if you wanted to show visible and invisible files *and* show the file indicators, you can use both the `-F` and `-a` options together.

```
$ ls -a -F
./          .cups/      Library/    scripts
../         .vminfo     Movies/
.DS_Store   Desktop/    Music/
.Trash/     Documents/  Pictures/
-bash_history Downloads/   Public/
$
```

You can group option by listing them in any order (with a few rare exceptions) and either with their own minus sign or after a single minus sign. All of the following versions of the `ls` command work the same way:

```
$ ls -a -F
$ ls -F -a
$ ls -aF
$ ls -Fa
$
```

list specific file

You can `ls` a specific file or files. This is primarily useful with other options that report additional information.

```
$ ls filename
```

list specific directory

You can `ls` a specific directory. It will list all of the files in the designated directory.

```
$ ls directory
```

You can the `-d` switch to have `ls` list just the named directory. This is pretty much useless by itself, but useful when combined with switches for specific kinds of information.

```
$ ls -d directory
```

list files and directories

You can `ls` a a combined list of specific files and directories.

```
$ ls filename directory
```

common error

The most common error is attempting to `ls` a directory or file that doesn't exist.

colorized

Use the `-G` option to colorize the output of `ls`.

```
$ ls -G
Desktop      Downloads    Movies       Pictures     file01.txt
names        scripts      Documents    Library      Music
Public       forthfunctions numberfile.txt testdir
$
```

You can edit your `.profile` file to set specific colors for directories, sockets, pipes, symlinks, etc. You can also set colors for executable files. You can even set colors for specific file extensions.

The default for Mac OS X (shown above) is royal blue for directories.

Daniel Sandman wrote:

I have this as an alias in my `~/.zshrc`.

```
alias ls="ls --color=auto -FshX"
```

list all subdirectory contents

Use the `-R` switch to show all of the contents of all of the subdirectories. This can be a huge list. The `-R` stands for recursive.

```
$ ls -R
```

long listing

Use the `-l` switch for a long listing. Each file or directory is on its own line. One sample line shown:

```
$ ls -l
drwxr-xr-x  2 admin  staff  68 Aug 20 16:43 testdir
$
```

The order of information

Mode file type (see chart below), file permissions (owner, group, other in the order of read, write, execute), possible special information.

```
b  Block special file
c  Character special file
d  Directory
l  Symbolic link
s  Socket link
p  FIFO (pipe)
-  Regular file
```

If the file or directory has extended attributes the permissions field is followed by the `@` character.

If the file or directory has extended security information (such as an Access Control List), the permissions field is followed by the `+` character.

links The number of links.

user The user name. If the user name is unknown, the numeric ID is shown. Adding the `-n` switch will force the numeric ID instead.

group The group name. If the group name is unknown, the numeric ID is shown. Adding the `-n` switch will force the numeric ID instead.

size The number of bytes. If the file is a character special or block special file, the major and minor device numbers replace the size field.

date and time The abbreviated month, day-of-month, hour and minute the file was last modified. If the modification time is more than six (6) months past or future, then the year replaces the hour and minute fields.

pathname The name of the file or directory. If the file is a symbolic link, the

pathname of the linked-to file is preceded by `->`.

The first line (before the individual file entries) is the number of blocks used by the files in the directory.

list in reverse order

Use the `-r` switch to show the results in reverse order.

```
$ ls -r
```

list by time of modifications

Use the `-t` switch to show the results by time of modification (most recent first).

```
$ ls -t
```

list by time of last access

Use the `-u` switch to show the results by time of last access (most recent first).

```
$ ls -u
```

list by time of file creation

Use the `-U` switch to show the results by time of file creation (most recent first).

```
$ ls -U
```

show time information

Use the `-T` switch to show full time information: month, day, hour, minute, second, year. This switch needs to be combined with the `-l` switch. Sample line below:

```
$ ls -Tl
drwxr-xr-x  2 admin  staff  68 Aug 20 16:43:15 2013 testdir
$
```

show extended information

Use the `-@` switch to show extended attribute keys and sizes. This switch needs to be combined with the `-l` switch.

```
$ ls -@l
```

show Access Control List

Use the `-e` switch to show the Access Control List (ACL) associated with a file when there is an ACL. This switch needs to be combined with the `-l` switch.

```
$ ls -el
```

show number of blocks

Use the `-s` switch to show the size in blocks for each file. The UNIX default block size is 512 bytes, but this can vary different on modern versions of UNIX or Linux.

```
$ ls -s
```

advanced information

scripting gotchas

This is an advanced item, but it is placed in this chapter so that you can easily find where to look it up when you need it.

Do not use the output of `ls` in a BASH `for` loop.

```
$ for i in $(ls *.mp3); do # Wrong!
$     command $i # Wrong!
$ done # Wrong!

$ for i in $(ls *.mp3) # Wrong!
$ for i in `ls *.mp3` # Wrong!
```

If any file name has spaces in it, then it will be word split. So, the MP3 for Alex Clair's "Too Close" (number four song on his "The Lateness of the Hour" album) might be 04 Too Close. In that case, your command would run on the files "04", "Too", and "Close", rather than "04 Too Close". Additional errors likely to follow. Listen to the song "[Too Close](#)" for free.

Double quote won't work either because that will cause the entire output of the `ls` command to be treated as a single item. Your loop will run once on all of the file names concatenated together.

```
$ for i in "$(ls *.mp3)"; # Wrong!
```

The solution is to run your loop without even using `ls`, relying on BASH's filename expansion. Don't forget to check for the possibility that there are no qualifying files in the current directory.

```
$ for i in *.mp3; do  
$   [[ -f "$i" ]] || continue  
$   command "$i"  
$ done
```

Thanks to Daniel Massimillano for a correction.

other

On November 8, 2010, Ramesh Natarajan named this the number twelve (12) most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

cd

chapter 20

summary

This chapter looks at `cd`, a UNIX (and Linux) command.

`cd` is used to Change Directory.

`cd` is a builtin command in `bash` and `csh`. There is also an external utility with the same name and functionality.

`cd` is used to change the directory you are working in. You type the command `cd` followed by a space and then the directory (folder) that you want to change to.

The `chdir` (change directory) command, the predecessor of `cd`, was described in the first UNIX book, *UNIX Programmer's Manual*, by Ken Thompson and Dennis Ritchie, published November 3, 1971.

change directory example

For the purposes of an example, we need to first find a directory to change to. Type the command `ls -F`.

```
$ ls -F
Desktop/      Music/        file01.txt
Documents/    Pictures/     file02.txt
Downloads/    Public/       names
Library/      Send registration@ numberfile.txt
Movies/       Sites/        testdir/
$
```

Your listing will be different than this one. Look for any name that has a slash (/) after it and use it as the *directory_name* in the following example. If you created the `testdir` in the [quick tour chapter](#), then use the second example listed here.


```
$ cd directory_name
admins-power-mac-g5:directory_name admin$
```

If you created the testdir in the [quick tour chapter](#), then use the following example:

```
$ cd testdir
admins-power-mac-g5:testdir admin$
```

Use the pwd command to confirm that you are now in your new directory.

```
$ pwd
/Users/admin/testdir
admins-power-mac-g5:testdir admin$
```

Use the cd command without any additional arguments to return to your home directory from anywhere.

```
$ cd
admins-power-mac-g5:~ admin$
```

Use the pwd command to confirm that you are now back in your home directory.

```
$ pwd
/Users/admin
admins-power-mac-g5:~ admin$
```

return to home directory

You can always return to your home directory from anywhere by typing cd command all by itself.

```
$ cd
admins-power-mac-g5:~ admin$
```

If the HOME variable is set (which is normal), then you can use it to return to your home directory.

```
$ cd $HOME
admins-power-mac-g5:~ admin$
```

return to previous directory

To return to the previous directory, type `cd ~-`

```
admins-power-mac-g5:~ admin$ cd testdir
changing to the testdir directory
admins-power-mac-g5:testdir admin$ cd ../Library
changing to the Library directory
admins-power-mac-g5:Library admin$ cd ~-
changing back to the testdir directory, the immediately preceding directory
admins-power-mac-g5:testdir admin$
```

go one level up

Type `cd ../` to go up one directory level. The following example starts in the testdir directory and goes up one level to the home directory.

```
admins-power-mac-g5:testdir admin$ cd ../
changing to the home directory, one level up from the testdir directory
admins-power-mac-g5:~ admin$
```

You can type a series of `../` to go up multiple directories. `cd ../ ../` will go up two levels. `cd ../ ../ ../` will go up three levels. And so on.

common cd errors

The two most common `cd` errors:

- Attempting to `cd` to a file. You can only `cd` to a directory.
- Attempting to `cd` to a directory that doesn't exist. The directory must already exist.

PC-DOS equivalent

`cd ../` is the UNIX equivalent of the MS-DOS or PC-DOS command `CD ..`. You can add the PC-DOS equivalent to your shell session with the `alias` command. To make the change permanent, add the following line to the `.bashrc` file in your home directory.

```
$ alias CD..="cd .."
```

advanced topic

The following is an advanced topic. I am placing it in this chapter so that you can easily find it when you need it in the future.

If you use `cd` to change to a symlinked directory, `pwd` will show the logical symlinked path rather than the actual physical path. You can use the `-P` option to force the change of directory to be resolved to the actual physical path.

```
$ cd -P /symlink
$ pwd
$ /Users/admin
$
```

other

On November 8, 2010, Ramesh Natarajan named this the number 14 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).



chapter 21

summary

This chapter looks at `cp`, a UNIX (and Linux) command.

`cp` is used to copy a file.

`cp` was part of the original 1969 version of UNICS (the original name for UNIX).

copy a file

Use the `cp` command to make a copy of a file. This example assumes you created the `names` file in the [quick tour chapter](#).

```
$ cp names saved_names
$
```

Notice that there is no confirmation of the file copy being made.

This silent behavior is typical of any UNIX shell. The shell will typically report errors, but remain silent on success. While disconcerting to those new to UNIX or Linux, you become accustomed to it. The original purpose was to save paper. When UNIX was first created, the terminals were mostly teletype machines and all output was printed to a roll of paper. It made sense to conserve on paper use to keep costs down.

You can use the `ls` command to confirm that the copy really was made. You won't be using up any paper.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library      Public      saved_names
```

```
$
```

`cp` makes an exact copy of a file.

common errors

Common errors:

- the source is a directory
- the source does not exist
- attempt to copy a file to itself

overwriting files

The plain `cp` command will simply replace any existing file with a matching name. No warning.

```
$ cp names saved_names  
$
```

In the above example, if the file `save_names` already existed, it will be replaced with a copy of `names`.

interactive confirmation

You can type `cp -i` to get an interactive confirmation before replacing a file. Enter `n` or just the RETURN key to stop the copy and prevent an overwrite. Enter `y` to go ahead with the copy and replace the old file.

```
$ cp -i names saved_names  
overwrite saved_names? (y/n [n]) n  
not overwritten  
$
```

force overwrites

Use the `-f` option to force the copy to overwrite any file with a matching name. This is the same as the default action of the `cp` command.

```
$ cp -f names saved_names
```

copy to a directory

To copy a file to a different directory, name the directory with a leading slash (/) as the destination:

```
$ cp sourcefilename directory/
```

Try this example:

```
$ cp names testdir/  
$ ls testdir  
names  
$
```

A copy of the file will be stored in the specified directory with the original name. You can add a new file name after the directory if you want to change the name of the copy at the same time you create it in the specified directory.

```
$ cp sourcefilename /directory/newname
```

Try this example:

```
$ cp names testdir/newnames  
$ ls testdir  
names          newnames  
$
```

copying an entire directory

To copy an entire source directory to a different directory, give the names of each directory:

```
$ cp sourcedirectory destinationdirectory/
```

This does not work on all systems without using the `-r` or `-R` switch (see next item).

copying an entire directory and subdirectories

If you want to copy a directory and all of its subdirectories (the directory subtree), then use the recursive switch. The recursive switch will be either `-r` or `-R`. Check the man page for your system.

```
$ cp -r sourcedirectory destinationdirectory/
```

Mac OS X supports both the `-r` and the `-R` switches for compatibility with legacy scripts, but on Mac OS X the `-r` option will not correctly copy special files, symbolic links, or fifos, while the `-R` option will copy them correctly.

Try this example:

```
$ cp -r testdir newdir/  
$ ls newdir  
names          newnames  
$
```

copying multiple items to a directory

You can create a list of sources (both files and directories) that are all put into a single destination directory. The last item listed must be a directory and is the destination. You can optionally use the `-r` or `-R` flag (which ever is appropriate for your system) to recursively copy source directories with all of their subdirectories. Some systems may require the `-r` or `-R` switch if you include directories as well as files into the source list.

```
$ cp sourcedirectory1/ sourcedirectory2/sourcefile  
destinationdirectory/
```

common error

A common error is that the destination folder already exists.

PC-DOS equivalent

`cp -i` is the UNIX equivalent of the MS-DOS or PC-DOS command `COPY`. You can add the PC-DOS equivalent to your shell session with the `alias` command. To make the change permanent, add the following line to the `.bashrc` file in your home directory. Note that this version adds interactive questioning before replacing a file, in a manner similar to PC-DOS. Note also that if you add this PC-DOS/MS-DOS equivalent, only add the all upper case version, because the lower case `type` is an important UNIX command that you will also need.

```
$ alias COPY="cp -i"
```


other

On November 8, 2010, Ramesh Natarajan named this the number 28 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

mv

chapter 22

summary

This chapter looks at `mv`, a UNIX (and Linux) command.

`mv` is used to move or rename a file.

rename a file

Use the `mv` command to rename a file. This example assumes you created the `names` and `saved_name` files in the [quick tour chapter](#).

```
$ mv saved_named old_names
$
```

Notice that the shell is once again silent with success. You can use the `ls` command to confirm that the rename really was made.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library      Public      old_names
$
```

common error

A common error is the source file not existing (often because of a typing or spelling error).

interactive confirmation

Use the `-i` option to have an interactive confirmation before overwriting an

existing file. Note that this does not seem to work on Mac OS X Mountain Lion.

```
$ mv -i names saved_names
overwrite saved_names? (y/n [n]) n
not overwritten
$
```

force overwrites

Use the `-f` option to force rename (`mv`) to overwrite any file with a matching name. This is the same as the default action of the `mv` command.

```
$ mv -f names saved_names
```

prevent overwrites

Use the `-n` option to prevent rename (`mv`) from overwriting any file with a matching name.

```
$ mv -n names saved_names
```

PC-DOS equivalent

`mv` is the UNIX equivalent of the MS-DOS or PC-DOS command `REN`. You can add the PC-DOS equivalent to your shell session with the `alias` command. To make the change permanent, add the following line to the `.bashrc` file in your home directory.

```
$ alias REN="mv"
```

other

On November 8, 2010, Ramesh Natarajan named this the number 29 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

rm

chapter 23

summary

This chapter looks at `rm`, a UNIX (and Linux) command.

`rm` removes or deletes files or directories.

`rm` is used to remove or erase a file.

`rm` was part of the original 1969 version of UNICS (the original name for UNIX).

delete a file

Use the `rm` (remove) command to delete a file. This example assumes you created the `saved_names` and `old_names` files in the [quick tour chapter](#).

```
$ rm old_names
$
```

You can use the `ls` command to confirm that the file was really deleted.

```
$ ls
Desktop      Movies      Send registration
Documents    Music       Sites
Downloads    Pictures    names
Library
$
```

safety

Before using `rm`, especially `rm` with globbing (such as using wild cards), try the same glob with `ls` first to make sure you will be removing the files you intend to remove.

For example, before running `rm foo*.txt`, run `ls foo*.txt`. Read the list and be sure that you are going to delete the files you really intend to delete.

Some UNIX and Linux users modify the `rm` command by aliasing it with the interactive form, `rm -i`. This changes the behavior of `rm` to always ask before deleting files.

```
$ alias rm="rm -i"
```

Unfortunately, this alias can cause some scripts to fail (possibly including system scripts that were provided with your distribution).

An alternative is to alias to a different, non-conflicting name. In this case, `del` might be appropriate.

```
$ alias del="rm -i"
```

PC-DOS equivalent

`rm -i` is the UNIX equivalent of the MS-DOS or PC-DOS command `DEL`. You can add the PC-DOS equivalent to your shell session with the `alias` command. To make the change permanent, add the following line to the `.bashrc` file in your home directory. Note that this version adds interactive questioning before deleting a file, in a manner similar to PC-DOS.

```
$ alias DEL="rm -i"
```

deleting a file name with spaces

Sometimes a file name has space or tab characters in it. This is strongly discouraged on a server, but is fairly common on a desktop Linux system. Enclose the file name in quotation marks.

```
$ rm "sample file"  
$
```

recursive

Type `rm` followed by the option `-r` followed by *directory name* to delete recursively. This means that the directory and all of its subdirectories will be removed,

even for non-empty directories. This is a fast way to remove directories and files in a single command. **This is also a very dangerous command.** Always include the directory name rather than `*` to prevent accidentally destroying the wrong directories.

```
$ rm -r directory-name
$
```

This is also a very dangerous command. You may want to include the `-i` interactive flag to confirm that you are really deleting the correct files.

```
$ rm -ri directory-name
$
```

dangerous command

WARNING! Do not test these examples. They will delete all of the files on your computer.

These commands often appear in cruel internet jokes.

```
$ rm -rf / # WARNING! This will delete all of the files on your
computer.
$ rm -rf * # WARNING! This will delete all of the files on your
computer.
```

advanced information

file won't delete

The following information is rather advanced and requires knowledge of that hasn't yet been introduced in this tutorial. This advanced material is placed here so that you can easily find it when using this nerdary as a reference rather a tutorial. For now, just note that this material is located here.

Sometimes you will attempt to delete a file and the shell will tell you the file can't be deleted.

```
$ rm stubborn_file
rm: cannot remove `stubborn_file': Permission denied
$
```

You can try to `chmod 777` the file or `chown` the file or directory.

The next line of defense is to use `sudo` and delete the file as root or superuser.

```
$ sudo rm stubborn_file
$
```

If you can't remove the file as root, then there are a number of different possibilities to consider. The following is a checklist of some of the possibilities.

It might be a matter of directory permissions. Directory permissions, not file permissions, control who can delete and create files. If you don't have write-permissions for the directory, you can't delete the file.

Interestingly, the converse is also true. A user can delete a file set to 000 and owned by root in a directory that he or she has access to, even though they can't even view the file contents. Of course, the sticky bit on a directory sets files so that they can only be deleted by their owners. It is common to set the sticky bit on certain key directories, such as `/tmp/`.

The root or superuser should be able to override any regular permissions and delete any file anyway, so the you will want to check Access Control Lists (ACLs), extended attributes, and other special features that may be in play. You can try `lsattr` to list the attributes on a Linux second extended file system (ext2) and `chattr` to change the attributes. The `a` attribute is append mode and can be removed with `chattr -a stubborn_file`. The `i` attribute is immutable and can be removed with `chattr -i stubborn_file`. On Mac OS X, you can use the similar `chflags` command (for UFS, HFS+, SMB, AFP, and FAT). See the man pages for details on these commands.

Another possibility is that the file may be on Network File System (NFS). Your local root won't matter. You need root access to the machine running NFS.

```
$ rm stubborn_file
$
```

There may be unusual characters in the file name.

You may be able to use auto-completion to correctly escape the file name. Type the first character of file name, then press the Tab key. The shell should auto-complete the file name with correct escapes for unusual characters.

You can check to see if there are invisible or non-printing characters or spaces or tabs at the beginning or end of the file name by comparing the results of `ls`

`stubborn_file` with the output of `ls *stubborn_file*`. If you get no result from the first command and a result from the second command, then there are extra characters. Try using the inum solution mentioned below.

Another method for checking for the real file name:

```
$ ls -la stubborn_file | sed -n 1
-rw-r--r-- 1 Mac staff 17 Jan 11 02:56 stubborn_file$
$
```

Another method for checking for the real file name is to use the `-B` option to force the printing of non-printable characters. The non-printable characters will be presented as `\xxx` where `xxx` is the numeric character code in octal. The `-b` option is similar, but will use C programming language escape codes whenever possible.

I have read that Linux supports the `-Q` option to place the file names within quotation marks, but I have not tested this on a Linux system.

Once you identify the real file name, you can use quotation marks to give the complete file name.

```
$ rm "stubborn file"
$
```

In some cases you may need to use single quotes. An example would be a file name with the character `$` in it.

```
$ rm 'stubborn $file'
$
```

You can try to remove the file using its inode rather than name. Use the correct inum output from your real session. Note there may be a long delay before success, so you may want to run this command in the background.

```
$ ls -i stubborn_file
3982096 stubborn_file
$ find . -inum 3982096 -exec rm -f {} \;
$
```

other

On November 8, 2010, Ramesh Natarajan named this the number 27 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used](#)

[UNIX / Linux Commands \(With Examples\).](#)

shred

chapter 24

summary

This chapter looks at `shred`, a Linux command.

`shred` is a secure method for eliminating data.

```
$ shred filename
```

Files are normally deleted by removing their file table entries. The data remains out on the hard drive (which is how file recovery programs can work).

Writing over the file actually eliminates the data so that nobody can ever read it.

This can take a while for large files or for many files.

Files deleted with `shred` can *not* be recovered (unless you previously stored them in a backup somewhere else).

Be especially careful when using `shred` with any wildcard characters.

You should probably never run `shred` from root or superuser.

Mac OS X

Mac OS X offers secure empty trash from the graphic interface (Finder menu, Secure Empty Trash menu item, which is directly under regular Empty Trash).

Mac OS X also has the `srmm` command, which is the secure equivalent of regular `rm`.

```
$ srm -rfv -s filename
```



The `-z` option will overwrite with zeros. The `-s` option will overwrite in a single pass (one pass) of random data. The `-m` option will perform a Department of Defense seven-pass deletion. No options will result in a 35-pass file erase, which will take a long time.

mkdir

chapter 25

summary

This chapter looks at `mkdir`, a UNIX (and Linux) command.

`mkdir` is used to make a directory.

make a directory

Use the `mkdir` command to make a new directory (folder).

```
$ mkdir testdir
admins-power-mac-g5:~ admin$
```

The example includes an extended prompt that shows the current working directory. Using the `ls` command will confirm that the directory now exists in the current working directory.

common errors

`mkdir` will fail if the directory already exists.

`mkdir` will fail if a file with the same name already exists.

multiple directories

You can name multiple directories with the `mkdir` command. Simply list each of the new directories after the `mkdir` with a space character between each directory name.

```
$ mkdir directory1 directory2 directory3
admins-power-mac-g5:~ admin$
```

create with permissions

Use the `-m` option to create a directory with specific permissions. The old school version of the `-m` switch used octal permissions.

The permission choices are the same as with the `chmod` command. Replace *mode* (`a=rwx` in the following example) with an appropriate mode argument. In the following example, the *mode* is `a=rwx`, which would give all users read, write, and execute permissions.

```
$ mkdir -m mode directory1 directory2 directory3
admins-power-mac-g5:~ admin$
```

This option is often used in shell scripts to lock down temporary directories.

use a path

All of the previous examples involved the current working directory. You can use `cd` to move to a new directory and create a directory there. Or you can give an entire path name to a specific directory, using either a relative or absolute path name to create the directory anywhere in the file system.

```
$ mkdir directory1/directory2/directory3
admins-power-mac-g5:~ admin$
```

common error

The most common error in using `mkdir` with a path is one or more of the intervening directories haven't been made yet. `mkdir` will fail.

creating parent directories

There is a solution to this problem. You can use the `-p` option to create directories along the path. You can therefore, create a series of parent and child directories all at once.

If you use the `-p` option and the directory already exists, the `mkdir` command will continue on through your path and create new directories as needed down to the last one you list.

```
$ mkdir -p directory1/directory2/directory3
admins-power-mac-g5:~ admin$
```

Intermediate directories are created with the permission bits of `rwXrwXrwX` (0777) as modified by the current umask, plus the write and search permission for the owner.

view directories made

You can use the `-v` to get a list of the directories created. This is most often used with the `-p` option, but you can use it by itself.

```
$ mkdir -v directory1/directory2/directory3
$
```

```
$ mkdir -pv directory1/directory2/directory3
$
```

The `-v` option is considered nonstandard and should not be used in shell scripts.

spaces in names

To create a directory with space in the directory name, you need to use quoting for the entire name so that the shell treats it as a single name rather than a series of individual directory names separated by spaces.

```
$ mkdir "directory name"
$
```

While it is common to use spaces in file and directory names in graphic user interfaces (such as Macintosh, OS/2, and Windows, as well as Gnome or KDE), this may cause failure with older scripts or programs. Some programs may convert the spaces in a directory name into `%20`, such as converting "Name with spaces" into "Name%20with%20spaces". This might cause confusion or failure.

long options

The long options are:

<code>-m</code>	<code>--mode=MODE</code>
<code>-p</code>	<code>--parents</code>
<code>-v</code>	<code>-verbose</code>


```
-Z      --context=CONTEXT
        --help
        --version
```

advanced information

The following items are advanced topics. They are included here so that you can easily find them when needed.

scripting mkdir

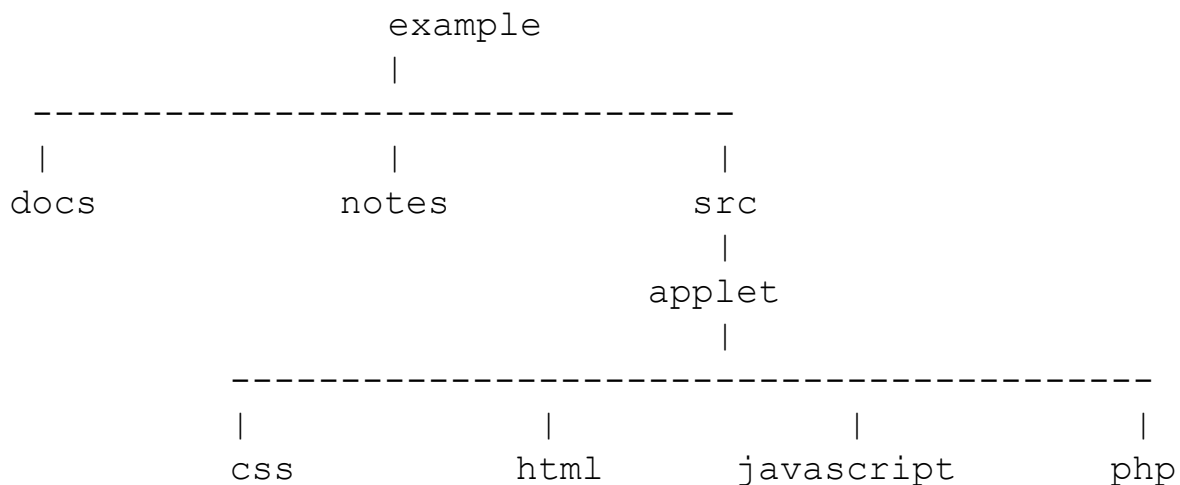
If you create a directory in a script, you will want to check first to see if the script actually exists. The following line of code will create a directory called `tmp`

```
$ test ! -d $HOME/tmp && mkdir $HOME/tmp
```

This line relies on the short circuit evaluation by the `test` statement. The first part of the `test` checks to see if the specified directory does not exist. If the specified directory already exists, the `test` fails and further evaluation stops. If the `test` passes, then the `mkdir` command is run.

create an entire directory tree

ou can create an entire directory tree all at once. The example will create the following directory tree (which will be confirmed with `ls` commands):



```
$ mkdir -p
example/{src/applet/{css,html,php,javascript},docs,notes}
$ ls example
docs    notes  src
```

```
$ ls example/src
applet
$ ls example/src/applet
css      html      javascript  php
$
```

The { } curly braces are used to create directories at the same level and the directories at the same level are separated by the , comma.

create a directory and change to it

You can use the following function to both `mkdir` a new directory and `cd` to the newly created directory, all in one command.

```
$ function mkdircd () { mkdir -p "$@" && eval cd "\"\${$#}\""; }
$
```

This function will work even if the directory name has spaces.

various operating systems

The `mkdir` command appears in the Linux, Mac OS X, OS/2, PC-DOS (also called MS-DOS), UNIX, and Windows operating systems. It also appears in the **PHP** programming language. In OS/2, PC-DOS, and Windows, the command can be abbreviated `md`.

set security context

When running SELinux, you can use the `-Z` or `--context` switch to set the security context. You must give the full context as `user:role:type`.

An example from the CentOS forum:

```
$ mkdir --context=system_u:object_r:httpd_sys_content_t:s0
/var/www/example.org
$
```

history

The `mkdir` command appeared in Version 1 of AT&T UNIX. In early versions of UNIX, the `mkdir` command had to be `setuid root` because the kernel did not yet have a `mkdir` syscall. The `mkdir` command made a directory with the `mknod` syscall, followed by linking in the `.` and `..` directories.

The `mkdir` syscall originated in 4.2 BSD and was added to System V in Release 3.0.

other

On November 8, 2010, Ramesh Natarajan named this the number 35 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

alias

chapter 26

summary

This chapter looks at `alias`, a UNIX (and Linux) command.

`alias` is used to create names for commonly performed commands, scripts, functions, and combinations.

`alias` is a builtin command in `bash` and `csh`. There is also an external utility with the same name and functionality.

example

You can use the `alias` command to modify the `rm` so that it always displays an interactive query before deleting a file.

```
$ alias rm="rm -i"
```

Unfortunately, this alias can cause some scripts to fail (possibly including system scripts that were provided with your distribution). Any scripts that rely on the unmodified version of an aliased `rm` are likely to fail or produce strange results because of your alias.

A better alternative is to use an alias to a different, non-conflicting name. In this case, `del` might be appropriate.

```
$ alias del="rm -i"
```

overriding aliases

If you have set an alias on a command or utility, you can always run the raw

unmodified command or utility by typing the absolute directory path to the command. For example, if you set an alias to have `ls` always show hidden files, you can still run the regular `ls` by typing its full path name.

```
$ alias ls="ls -a" #modify the ls command
$ /bin/ls #run the raw ls command
```

Some system administrators always type out the complete path name for a command when using the root or superuser account to help prevent mistakes.

some common aliases

```
$ alias ls="ls -color=auto"
$ alias dir="ls -color=auto -format=vertical"
$ alias vdir="ls -color=auto -format=long"
$ alias ll="ls -l"
$ alias la="ls -A"
$ alias l="ls -CF"
```

no recursion

`alias` is not recursive.

If you set an alias, it can *not* be used inside the creation of another alias.

listing aliases

You can list current aliases by using the `alias -p` option.

```
$ alias -p
alias TYPE='cat'
alias DIR='ls -la'
alias COPY='cp -i'
alias REN='mv'
alias DEL='rm -i'
$
```

The environmental variable `$BASH_ALIASES` contains an associative array of all existing aliases.

unset an alias

The BASH command `unalias` will unset or delete a specific alias. Using the `-a` option will unset all aliases.

```
$ unalias alias_name  
$  
$ unalias -a  
$
```

pipes

chapter 27

summary

This chapter looks at pipes.

Pipes are most commonly used as a method to chain different utilities together, with the output of one piped to the input of the next.

history

Ken Thompson invented the pipe in 1972.

The pipe is a standard mechanism for allowing the output of one program or process to be used as the input for another program or process.

Pipes allow the UNIX philosophy of having many small programs that each do one function very well and then write scripts that combine these small utility programs to accomplish bigger tasks.

how to pipe

To pipe the output of one UNIX command or utility to the next, simply place the | (vertical bar character) between the two processes:

```
$ cat file01.txt | sort | lp
```

The example obtains the contents of the designated file, sorts the contents, and then sends the result to the printer.

scripts

chapter 28

summary

This chapter looks at scripts.

Scripts are the power tools for system administrators. Scripts allow you to automate tasks.

shell initialization files

When you start Terminal (or, in some cases, run `login`) the shell will run two initialization scripts:

```
/etc/profile  
.profile
```

Note that these are the file names for BASH. See the [login chapter](#) for the default initialization file names for other shells.

The `/etc/profile` initialization script is maintained by the system administrator and is the first initialization script run for all users.

Each user has their own `.profile` script in their home directory.

The `.profile` includes three basic operations (set terminal type, set path to commands, and set path to man pages) and any customization created by the individual user.

Before the initialization scripts are run, the shell is considered to be an *uninitialized shell*.

.profile

The `.profile` initialization script sets the terminal type:

For example: `TERM=vt100`

The `.profile` initialization script sets the path to the directory or directories that contains the commands and utilities.

For example: `PATH=/bin:/usr/bin`

Notice the colon character (:) is used as a separator between directories, allowing commands and utilities to be organized in many directories.

The `.profile` initialization script sets the path to the directory or directories containing the manual (`man`) pages.

For example: `MANPATH=/usr/man:/usr/share/man`

interactive and noninteractive

When you directly enter a command or commands and the shell performs the commands for you, that is the *interactive* mode.

You can also have the shell run scripts or commands in a *noninteractive* or *batch* mode. This is great for a system administrator automating a server or other large scale UNIX/Linux/Mac OS X system.

When an non-interactive shell (or subshell) finishes running a script, it exits.

making a script executable

Scripts are just text files with lists of instructions.

To make a text file into an executable script that you can run, simply type `chmod a+x filename`.

```
$ chmod a+x filename
$
```

Also, add the *magic line* `#!/bin/sh` as the first line in the text file. This special magic line tells the shell which program to use to run the script (in this case, the basic shell program).

Shell Files and Interpreter Invocation
File Extensions
from [Google Shell Style Guide](#)

Executables should have no extension (strongly preferred) or a `.sh` extension. Libraries must have a `.sh` extension and should not be executable.

It is not necessary to know what language a program is written in when executing it and shell doesn't require an extension so we prefer not to use one for executables.

However, for libraries it's important to know what language it is and sometimes there's a need to have similar libraries in different languages. This allows library files with identical purposes but different languages to be identically named except for the language-specific suffix.

scripting languages

Some of the scripting languages available on Linux and Mac OS X are: `sh`, `bash`, `perl`, `PHP`, `python`, and `ruby`.

Examples of running scripts in these languages:

```
$ sh scriptfilename
$ bash scriptfilename
$ perl scriptfilename
$ php scriptfilename
$ python scriptfilename
$ ruby scriptfilename
$
```

shell script example

Create a directory (folder) for your personal scripts called `scripts`:

```
$ mkdir scripts
$
```

Create a shell script called `script.sh` and save it in the new scripts directory (folder):

```
#!/bin/sh
echo "Hello World!"
```

Use the `chmod` command to make the new file an executable script:

```
$ chmod u+x /scripts/script.sh
$
```

Add the scripts directory to your command path:

```
$ export PATH="$PATH:~/scripts"
$
```

Run your new script:

```
$ script.sh
Hello World!
$
```

You can run your script directly in a specific shell:

```
$ rbash script.sh

$ sh script.sh

$ bash -x i
```

php script example

This example assumes that you have created the `scripts` directory.

Create a php script called `script.php` and save it in the new scripts directory (folder):

```
<?php
echo "Hello World!"
?>
```

Notice that we skip the `chmod` step.

Run your new script by running the `php` program with your script as the file to execute:

```
$ php ~/scripts/script.php
Hello World!
$
```

Note that the shell does *not* render HTML, so if you run a web script, you will see

raw HTML, CSS, and JavaScript as plain text in your terminal window.

You can run `perl`, `ruby`, and `python` scripts in the same manner.

There is more complete information in the chapter on [php and shell](#).

When to use Shell

from [Google Shell Style Guide](#)

Shell should only be used for small utilities or simple wrapper scripts.

While shell scripting isn't a development language, it is used for writing various utility scripts throughout Google. This style guide is more a recognition of its use rather than a suggestion that it be used for widespread deployment.

Some guidelines:

- If you're mostly calling other utilities and are doing relatively little data manipulation, shell is an acceptable choice for the task.
- If performance matters, use something other than shell.
- If you find you need to use arrays for anything more than assignment of `${PIPESTATUS}`, you should use `Python`.
- If you are writing a script that is more than 100 lines long, you should probably be writing it in `Python` instead. Bear in mind that scripts grow. Rewrite your script in another language early to avoid a time-consuming rewrite at a later date.

sysadmin and root/superuser

chapter 29

summary

This chapter looks at system administration and the root or superuser account.

As we look at more advanced features and commands, we need to become aware of the root or superuser account and capabilities and how to safely access that power.

sysadmin

In the UNIX world, the system administrator is often called the sysadmin.

root/superuser

The root or superuser account has total authority to do anything on the system. This power is great for fixing problems, but bad because one accidentally mistyped character could be very destructive. Some systems also have admin accounts of similar power.

Because of the potential for destructiveness, system administrators typically login with either a normal user account or a limited admin account for every day work and then switch to superuser or root only when absolutely necessary (and then immediately switch back).

The UNIX command for temporarily switching to root or superuser power is the `sudo` command, discussed in the [next chapter](#).

special powers

The root or superuser account has powers that “mere mortal” accounts don’t have.

The root account has access to commands that effect the entire computer or system, such as the ability to halt or shutdown the system.

The root account is not affected by read and write file access permissions. The root or superuser account can create, remove, read, or write any file anywhere on the system.

Some commands have built-in restrictions that the root or superuser can ignore. For example, the system administrator can change any user’s password without knowing the old password.

sudo

chapter 30

summary

This chapter looks at `sudo`, a UNIX (and Linux) command.

WARNING: Never trust any Terminal/Shell commands you find on the internet. Only run shell commands you understand. In particular, *never* run anything that includes `sudo` anywhere in the command line unless you are absolutely certain what the command does. When you run a command line with `sudo` you are giving permission to have complete (possibly destructive) control of your computer at the root level. And, yes, this advice applies even to this website. Don't run any commands with `sudo` unless you know for sure what you are doing.

sudo

The `sudo` command allows you to run a single command as another user, including at superuser or root level from a normal account. You will be asked for the password before the command will actually run.

This keeps you firmly in a normal account (with less danger of catastrophic failures), while still giving easy access to root or superuser power when really needed.

The `sudo` program was originally written by Bob Coggeshall and Cliff Spencer in 1980 at the Department of Computer Science at SUNY/Buffalo.

`sudo` is a concatenation of `su` (substitute user) and `do` (perform an action).

To run a single command as superuser or root, type `sudo` followed by a command.

```
$ sudo command
```

You will normally be asked for your password (exceptions listed below).

`sudo` can be configured to not require a password (very bad idea other than single user personal systems). `sudo` can also be configured to require the root password (rather than the current user's password).

On Mac OS X the `sudo` command will fail if your account has no password.

On Mac OS X the `sudo` commands password prompt will not display anything (not even bullets or asterisks) while you type your password.

You will not be asked for a password if you use `sudo` from the root or superuser account. You will not be asked for a password if you use `sudo` and the target user is the same as the invoking user.

Some systems have a timer set (usually five minutes). You can run additional `sudo` commands without a password during the time period.

run in root shell

To change to in the root shell, type `sudo` followed by the option `-s`. The following warning is from Mac OS X (entered a root shell and then immediately returned to the normal shell). Note the change to the pound sign (`#`) prompt.

```
$ sudo -s

WARNING: Improper use of the sudo command could lead to data loss
typing when using sudo. Type "man sudo" for more information.

To proceed, enter your password, or type Ctrl-C to abort.

Password:
bash-3.2# exit
$
```

other users

To run a command as another user, type `sudo` followed by the option `-u` followed by the user account name followed by a command.

```
$ sudo -u username command
```

To view the home directory of a particular user:

```
$ sudo -u username ls ~username
```

edit files in www

To edit a file (this example is for `index.html`) as user `www`:

```
$ sudo -u www vim ~www/htdocs/index.html
```

which password

On most systems, you will authenticate with your own password rather than with the root or superuser password. The list of users authorized to run `sudo` are in the file `/usr/local/etc/sudoers` or `/etc/sudoers` (on Mac OS X, `/private/etc/sudoers`). These authorized users are identified in the `sudoers` file as `admin`.

The `sudoers` configuration file offers a wide variety of configuration options, including enabling root commands only from the invoking terminal; not requiring a password for certain commands; requiring a password per user or per group; requiring re-entry of a password every time for particular command lines; never requiring re-entry of a password for a particular command line. The `sudoers` configuration file can also be set support the passing of arguments or multiple commands and also supports commands with regular expressions.

timeout

`sudo` can set timeout limits. This is done with the `timeout` option. This can be configured globally, per user, or per application. The timeout can be retained only per tty or globally per user. The user or application only has root authentication until the timeout occurs.

forgot to use sudo

Sometimes you type a command and forget that you needed to use `sudo` until you see the error message. You can type `sudo !!` to run the previous command with root privileges.

```
$ head /etc/passwd
head: /etc/passwd: Permission denied
$ sudo !!
```

to view unreadable directories

To view unreadable directories:

```
$ sudo ls /usr/local/protected
```

shutdown

To shutdown a server:

```
$ sudo -r +15 "quick reboot"
```

saving system file in vim

The ideal method for editing and saving a system file that can only be saved by the root user is to prepend the `vim` command with `sudo`. Then the `vim` command `:w` will work because the `vim` program was launched with root privileges.

```
$ sudo vim /etc/passwd
$ some editing commands
$ :w
```

So, what do you do if you start editing the file and then remember that you need root permission to save it? Add `!sudo tee %` to the `vim` save command.

```
$ vim /etc/passwd
$ some editing commands
$ :w !sudo tee %
```

usage listing

To make a usage listing of the directories in the `/home` partition (note that this runs the commands in a sub-shell to make the `cd` and file redirection work):

```
$ sudo sh -c "cd /home ; du -s * | sort -rn > USAGE"
```

view sudoers configuration

To view the `sudoers` current configuration settings, type:

```
$ sudo -ll
```

editing sudoers file

Run the `visudo` command line tool to safely edit the sudoers configuration file. You will be presented with the `vi` editing interface (this can be changed by setting the shell `EDITOR` environment variable to a different text editor, such as `emacs`).

Any syntax error in the `sudoers` configuration file will make `sudo` stop working globally. Therefore, always use `visudo` to edit the `sudoers` file. `visudo` also provides security locks to prevent multiple simultaneous edits and other possible security problems.

graphic equivalents

The utilities `kdesudo` (KDE) and `gksudo` (Gnome) provide a graphic user interface version of `sudo` (both are based on `sudo`). Mac OS X Authorization Services provides a graphic user interface with administrative privileges (but is not based on the UNIX `sudo`).

start a shell as root

If you need to do extended work as root, you can start up a root shell from your user account:

```
$ sudo bash
```

running commands as root

`sudo` only works for programs, not for any built-in commands. If you attempt it, you will get an error message stating `command not found`. The solution is to start a root shell:

```
$ sudo bash
```

security

The system can be set up to send a mail to the root informing of unauthorized attempts at using `sudo`.

The system can be set up to log both successful and unsuccessful attempts to `sudo`.

Some programs (such as editors) allow a user to run commands via shell escapes, avoiding `sudo` checks. You can use `sudo`'s `noexec` functionality to prevent shell escapes.

`sudo` never does any validation of the ARGUMENTS passed to a program.

`sudo` defaults to extensive logging, using the `syslogd` system log daemon to log all commands issued with `sudo` into a central host and local host file. This allows a complete audit trail of system access.

A system can be setup so that all machines in a system use the same `sudoers` file, allowing better central administration of a network.

trace

You can't `sudo strace ...` (fill in the rest of the command any way you want) because `sudo` can't gain its privileges while being traced.

polkit alternative

`polkit` (formerly PolicyKit) is an alternative control component for system-wide privileges.

other

In June 2009, Ken Milberg named this command as one of the Top 50 universal UNIX commands at this web page [Top 50 Universal UNIX commands](#). Note that this web page requires agreeing to be spammed before you can read it.

SUID/SGID

from [Google Shell Style Guide](#)

SUID and SGID are *forbidden* on shell scripts.

There are too many security issues with shell that make it nearly impossible to secure sufficiently to allow SUID/SGID. While bash does make it difficult to run SUID, it's still possible on some platforms which is why we're being explicit about banning it.

Use `sudo` to provide elevated access if you need it.

su

chapter 31

summary

This chapter looks at `su` (switch user), a UNIX (and Linux) command.

switch to another user account

You can use the `su` command to switch another user account. This allows a system administrator to fix things signed in to a particular user's account rather than from the root account, including using the user's settings and privileges and accesses rather than those of root.

other

On November 8, 2010, Ramesh Natarajan named this the number 44 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

who

chapter 32

summary

This chapter looks at `who`, a UNIX (and Linux) command.

The `who` command was described in the first UNIX book, *UNIX Programmer's Manual*, by Ken Thompson and Dennis Ritchie, published November 3, 1971.

list of who is using a system

The `who` command will tell you all of the users who are currently logged into a computer. This is not particularly informative on a personal computer where you are the only person using the computer, but it can be useful on a server or a large computing system.

Type `who` followed by the ENTER or RETURN key.

```
$ who
admin  console Aug 24 18:47
admin  ttys000 Aug 24 20:09
$
```

The format is the login name of the user, followed by the user's terminal port, followed by the month, day, and time of login.

which account is being used

The command is `who` with the arguments `am i` will tell you which account you are currently using. This can be useful for a system administrator if the system administrator is using the `su` command and wants to be sure about which the system administrator is currently using.

```
$ who am i
```

```
admin    ttys000  Aug 25 17:30  
$
```

A related command without any spaces, `whoami`, lets you know which account you are currently logged in with.

```
$ whoami  
admin    ttys000  Aug 25 17:30  
$
```

advanced file systems

chapter 33

summary

This chapter is an advanced look at UNIX (and Linux) file systems.

Some of the information in this chapter is a refresher carried over from previous chapters. Also, see the [chapter](#) on major directories.

Important reminder: Always use the root or superuser account sparingly. Do most of your work with an ordinary user account and switch to the root account only when needed. And then switch back as soon as possible. The `sudo` command can be used for temporarily switching to the root account to run a particular command.

absolute paths

It is common for a system administrator logged in to the root or superuser account to type out the absolute path to a command or utility. This will skip any aliases. This will also skip over any commands in the user's defined search path. This guarantees that the correct command or utility will run.

everything is files

In UNIX, everything is a file, even hardware devices such as printers, hard drives, and other devices. Even UNIX abstractions such as directories, pipes, and file redirection are treated as files.

Because everything is a file, the operating system can provide a common processing and communication interface. This is essential to the UNIX approach of using lots of small programs or utilities that do one job well and connecting these programs with shell scripts to do a wide variety of activities.

Linux takes the idea of everything is files even further than UNIX. Hardware devices have device files in the `/dev` directory on Linux.

man pages

Many forms of UNIX have a `man` page on filesystems.

```
$ man filesystems
```

If your system has this man page, you will find a general overview of UNIX file systems of all types, including CDROMs, floppy disks, and tape drives.

diskless

Almost every UNIX system has a root directory and file system, which is stored on one or more hard drives connected to the computer system.

There are diskless nodes. These are computers that don't have their own local hard drive. Diskless nodes run off a network server. Mac OS X makes it easy to set up a computer to run in this manner. This approach is often used when an organization wants central control of all of the computers in the organization, such as a computer lab at a school.

root directory

You can examine the contents of the root directory with the `ls -F /` command.

```
$ ls -F /
Applications/  Volumes/      mach_kernel.ctfsys
Desktop DB    bin/           net/
Desktop DF    cores/         private/
Developer/    dev/           sbin/
Library/      etc@           tmp@
Network/      home/          usr/
System/       mach-Kernal    var@
Users/
```

The above example is for Mac OS X 10.5.8 Leopard.

On many systems you will find a file called `unix`. This is the main UNIX operating

system kernel.

On some systems you will find `root.home`. This is a temporary file created when running Netscape as root. This would be an example of an application-specific file.

some important directories

The following is a brief description of some of the major directories. Not all systems will have all of these directories. This list has additional information beyond the similar list in the [chapter](#) file system basics.

/ The root directory of the entire file system.

/bin A collection of binary files, better known as programs. Many of the standard system commands are stored here.

/boot or **/kernel** The files needed to boot or start your computer.

/dev The devices connected to your computer (remember, everything, even hardware devices, is treated as a file in UNIX or Linux). Examples are the keyboard, disks, and printers.

/etc System configuration files, startup procedures, and shutdown procedures.

/home or **/users** The home directories for each user.

/lib or **/Library** Library files used by executable programs.

/net Other networked systems (again, treated as files).

/opt Third party software. In older systems this might be **/usr/local**

/private On Mac OS X, this is the location of the UNIX files. It is normally kept hidden from all users in Finder, but is visible in your terminal emulator and shell. Mac OS X has links to the major UNIX directories at the root level so that UNIX and Linux tools can find their files in the standard locations.

/proc Information about processes and devices.

/sbin System binaries (that is, system programs).

/tmp Space for temporary files. Required by all forms of UNIX. This directory is normally erased on bootup.

/usr User binaries (programs), libraries, manuals, and docs. Common subdirectories include online help (`/usr/share`), header files for application development (`/usr/include`), and system configuration files related to low-level

hardware (such as `/usr/cpu` and `/usr/gfx`).

It is rare that a system administrator would even look at the low level hardware directories, such as `/usr/cpu`. The system automatically manages these directories and their contents. It is unwise for a system administrator to modify these directories and their contents. Messing with these will almost certainly bring the system down and may require reinstalling the entire system.

/var Variable files. Some common subdirectories include X Windows files (`/var/X11`), system services files, applications related files (`/var/netcape`), system administration files and data (`/var/adm` or `/var/spool`), a second temporary directory (`/var/tmp`) that is not normally erased on bootup.

Swap Virtual memory on a hard drive. Allows the memory manager to swap some data and program segments to hard drive to expand the amount of memory available beyond the limits of physical memory.

For a more advanced and complete listing, see the [chapter](#) on major directories.

FAQs

You can find a FAQ (Frequently Asked Questions) file for all UNIX variants. Find the appropriate FAQ for your version of UNIX or Linux and look up the details for your system.

/etc

A key directory for new system administrators to learn is the `/etc` directory. The `/etc` directory contains key system administration files.

Because the `/etc` files change system behavior and properties, a system administrator spends a lot of time modifying and updating these files.

A new system administrator can learn a lot about UNIX by studying the files in the `/etc` directory. Do not change these files until you have figured out what you are doing. This is not the place for random experimentation.

A few key `/etc` files a system administrator should know.

`/etc/sys_id` is the name of the system. It may contain the full domain. Not used on Mac OS X.

`/etc/hosts` is the summary of the full host names. A system administrator will add to this standard file.

`/etc/fstab` is a list of file systems to mount on bootup. Mac OS X has

`/etc/fstab`.hd.

`/etc/passwd` is the password file. It includes a number of items of basic information on user accounts.

`/etc/group` is the group file. It contains details of all user groups.

`/var`

Another important directory for system administrators to know is the `/var` directory, which contains configuration files for many system services.

For example, the `/var/named` file configures Domain Name Service and the `/var/yp` file configures Network Information Service.

where to find answers

Surprisingly, there won't be a grand tour of the UNIX file system here.

A UNIX system typically has thousands of files. Maybe tens of thousands of files. A system administrator doesn't normally need to know what these files are or where they are located.

A system administrator should know where to find relevant information when a problem occurs.

Many system administrators keep a handy notebook with information on where to find answers to various problems. It is far more useful to know where to find correct answers than to know try to memorize all answers.

And don't forget popular search engines as a source for answers. There is very little chance that you are the first system administrator in the world to encounter a particular problem. A quick internet search should reveal many others asking for help on the same problem, along with answers.

hidden files and directories

Any file or directory that starts with the period or dot (`.`) character is considered hidden.

In MS-DOS (and Windows) and the original Macintosh, files and directories are hidden by setting a special attribute.

Mac OS X has a hybrid. When using the command line shell, Mac OS X acts exactly like any other version of UNIX. But when using the Finder, Mac OS X also recognizes the invisible bit. This is how the entire UNIX operating system is kept out

of the hands of the typical Mac OS X user.

Access permissions are separate from invisibility. In MS-DOS, a hidden file can not be written to. In UNIX, you can freely read and write and otherwise modify a hidden file.

In UNIX, file access is controlled by access permissions.

As a reminder from the `ls` chapter, the `-a` option will give a list of all files, including hidden files.

```
$ ls -a
```

Each user has a few important hidden files that configure their basic working environment when they login. These include:

- `.cshrc`
- `.login`
- `.profile`

major directories

chapter 34

summary

This chapter looks at some of the major directories (folders) on UNIX/Linux/Mac OS X.

directory listing

The following is a brief description of some of the major directories. Not all systems will have all of these directories.

/ The root directory of the entire file system.

/Applications On Mac OS X, this is the location of the Macintosh programs.

/Applications/Utilities On Mac OS X, this is the location of the graphic user interface based utility programs.

/bin A collection of binary files, better known as programs. These are the programs needed by the operating system that normal users might use. Many of the standard system commands are stored here. Contrast with **/sbin** below.

/boot or **/kernel** The files needed to boot or start your computer. Includes the bootstrap loader, the very first thing loaded when your computer starts. On Linux, it usually includes the Linux kernel in the compressed file `vmlinuz`.

/dev The devices connected to your computer (remember, everything, even hardware devices, is treated as a file in UNIX or Linux). Examples are the keyboard, disks, and printers.

/etc System-wide configuration files, startup procedures, and shutdown procedures.

/home or **/users** The home directories for each user. Contains such things as user settings, customization files, documents, data, mail, and caches. The contents of this directory should be preserved during operating system updates or upgrades.

Every new user account starts with a few basic files such as `.login`, `.cshrc`, and `.profile`. A system administrator may want to add additional customization such as an introductory README file.

/lib or **/Library** Shared library files and kernel modules.

/lost+found Files recovered during filesystem repair.

/mnt Mount points for removable media (floppy disks, CD-ROM, DVD, Zip drives, etc.), partitions for other operating systems, network shares, and anything else temporarily mounted to the file system. Linux and UNIX don't use Windows-style drive letters.

/net Other networked systems (again, treated as files).

/opt Optional large applications and third party software. In older systems this might be **/usr/local**.

/private On Mac OS X, this is the location of the UNIX files. It is normally kept hidden from all users in Finder, but is visible in your terminal emulator and shell. Mac OS X has links to the major UNIX directories at the root level so that UNIX and Linux tools can find their files in the standard locations.

/proc A Linux-only directory. Information about processes and devices. The files are illusionary. The files don't exist on the disk, but are actually stored in memory. Many Linux utilities derive their information from these files.

/sbin System binaries (that is, system programs). These are programs that general users don't normally use (although they can). This directory is not in the PATH for general users. Contrast with **/bin** listed above.

/root The home directory for the system administrator (superuser or root).

/tmp Space for temporary files. Required by all forms of UNIX. This directory may automatically be cleaned on a regular basis. This directory is normally erased on bootup.

/usr User binaries (programs), libraries, manuals, and documentation (docs). Common subdirectories include online help (/usr/share), header files for application development (/usr/include), and system configuration files related to low-level hardware (such as /usr/cpu and /usr/gfx).

/var Files that change, such as spool directories, log files, lock files, temporary files, and formatted (on use) manual pages. Some common subdirectories include X Windows files (/var/X11), system services files, applications related files (/var/netscape), system administration files and data (/var/adm or /var/spool), a second temporary directory (/var/tmp) that is not normally erased on bootup.

Swap Virtual memory on a hard drive. Allows the memory manager to swap some data and program segments to hard drive to expand the amount of memory available beyond the limits of physical memory.

Network File System (NFS)

chapter 35

summary

This chapter looks at Network File System (NFS) on UNIX/Linux/Mac OS X.

Network File System

The Network File System (NFS) allows a directory on one machine to be accessed from another machine. This is an important feature of UNIX.

The procedure for setting up the Network File System is called mounting.

NFS provides a seamless method to merge different file systems from different physical machines into a large shared structure. NFS works across different kinds of UNIX or Linux and even different kinds of processors.

With NFS, a user doesn't need to know or keep track of the actual physical locations of directories and files. The NFS files and directories appear to be a normal part of the file system and are accessed with the exact same methods as any local file or directory.

mount/export

The `mount` command will replace a local directory with a directory from another machine. Anyone viewing the mounted directory will see the remote directory as if it were local.

The `export` command is used to make a directory available for other computers to mount it.

The `/etc/exports` file contains a list of directories to be exported.

`mount` should be run from root.

availability

Network File System (NFS) was developed by Sun Microsystems in 1984 and is based on the Open Network Computing Remote Procedure Call (ONC RPC) system.

NFS runs on most UNIX and UNIX-like systems (including Solaris, AIX, Free BSD, HP-UX, Linux, and Mac OS X), as well as classic Macintosh, Microsoft Windows, Novell NetWare, and IBM AS/400.

Alternative remote file access protocols include Server Message Block (SMB, also called CIFS), Apple Filing Protocol (AFS), NetWare Core Protocol (NCP), and OS/400 File Server file system (QFileSvr.400).

tail

chapter 36

summary

This chapter looks at `tail`, a Unix (and Linux) command.

`tail` is used to report the last lines of a text file.

syntax:

```
tail [options...] [file...]
```

shells:	ash	bash	bsh	cs	ksh	sh	tcsh	zsh
File Name:	tail		Directory:	/usr/bin/			Type:	External

default

The default operation of `tail` is the last 10 lines of a text file to standard output (the example is from a file with less than 10 lines).

```
$ tail class="shellcodeblock"
#
# Configuration file for using the XML library in GNOME
applications
#
XML2_LIBDIR="-L/usr/lib"
XML2_LIBS="-lxml2 -lz -lpthread -licucore -lm "
XML2_INCLUDEDIR="-I/usr/include/libxml2"
MODULE_VERSION="xml2-2.7.3"

$
```


example: most recent user

Here is how to use the `tail` utility to show the last user created on the current system:

```
$ tail -1 /etc/passwd
```

number of files

You can use the `-n` option to set the number of lines, blocks, or bytes to output.

The option `tail -n1 filename` shows the last line.

```
$ tail -n1 xml2Conf.sh
MODULE_VERSION="xml2-2.7.3"
$
```

The `--lines=N` option is equivalent to the `-nN` option.

An obsolete format (still used on Sun Solaris, where the `-n` option is not supported) uses just the number of lines as the option.

```
$ tail -1 xml2Conf.sh
MODULE_VERSION="xml2-2.7.3"
$
```

number of characters

The option `tail -c8 filename` shows the last eight (8) characters (bytes).

```
$ tail -c8 xml2Conf.sh
-2.7.3"
$
```

Notice in the example that you only see seven characters. The newline character is the eighth character.

The `--bytes=N` option is equivalent to the `-cN` option.

An obsolete format (still used on Sun Solaris, where the `-c` option is not supported) uses the number of character followed by a `c` as the option.

```
$ tail -8c xml2Conf.sh
-2.7.3"
$
```

suppressing file names

If you provide `tail` with more than one file name, then it report the file names before the last lines of each file.

```
$ tail -n2 *Conf.sh
==>. xml2Conf.sh <==
XML2_INCLUDEDIR="-I/usr/include/libxml2"
MODULE_VERSION="xml2-2.7.3"

==>. xml1Conf.sh <==
XML2_INCLUDEDIR="-I/usr/include/libxml1"
MODULE_VERSION="xml2-2.7.1"
$
```

You can suppress the file name(s) with the `--silent` option. This is particularly useful if you are going to pipe the results to other Unix tools.

```
$ tail -n2 --silent *Conf.sh
XML2_INCLUDEDIR="-I/usr/include/libxml2"
MODULE_VERSION="xml2-2.7.3"

XML2_INCLUDEDIR="-I/usr/include/libxml1"
MODULE_VERSION="xml2-2.7.1"
$
```

The `--quiet` and `-q` options are equivalent to the `--silent` option.

file (log) monitoring

Use the `-f` (follow) option to monitor a log file. With the `-f` option, the `tail` utility will continue to monitor the file and send any new lines to standard out (unless redirected or piped elsewhere).

```
$ tail -f importantlogfile.txt
```

In most versions of Unix, the `--follow` or `--follow=descriptor` options are equivalent to the `-f` option.

If the file being monitored might be rotated, use the `-F` (follow) option to monitor a file, even if the original version of the file is renamed or removed and a new version of the file (with the same name) is created.

```
$ tail -F importantlogfile.txt
```

Use Control-C to interrupt the file monitoring.

You can append the ampersand (& to make the file monitoring a background process.

GNU Emacs emulates this Unix utility with the `auto-revert-tail-mode` mode.

In most versions of Unix, the `--follow=name --retry` option is equivalent to the `-F` option.

other

On November 8, 2010, Ramesh Natarajan named this the number 42 most frequently used Unix/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

WC

chapter 37

summary

This chapter looks at `wc`, a UNIX (and Linux) command.

`wc` is used to count lines, characters, and words in a file.

word count command

Use the `wc` command to count the number of words in your file.

```
$ wc names
      6      6     38 names
$
```

The format is the number of lines (6), followed by the number of words (6), followed by the number of characters (38), followed by the name of the file (names).

multiple files

You can use the `wc` command with several file names.

```
$ wc names file01.txt
      6      6     38 names
      9     29    134 file01.txt
     15     35    172 total
$
```

The output gives the results for each file (in the order they were listed in the command) and a final line with the totals for all of the files combined.

count the number of lines

Use the `wc` command with the `-l` option to count the number of lines in your file.

```
$ wc -l names
    6 names
$
```

The output is the number of lines and the name of the file.

count the number of words

Use the `wc` command with the `-w` option to count the number of words in your file.

```
$ wc -w names
    6 names
$
```

The output is the number of words and the name of the file.

count the number of characters

Use the `wc` command with the `-m` or `-c` option to count the number of characters in your file.

Solaris and HP-UX use `-m`.

Linux uses `-c`.

Mac OS X accepts both `-m` and `-c`.

```
$ wc -c names
   38 names
$
```

The output is the number of characters and the name of the file.

multiple options

You can use multiple options in a single command. The order does not matter. For example, all of the following variations will count the number of lines and words:

```
$ wc -l -w filename
$ wc -w -l filename
$ wc -lw filename
```

```
$ wc -wl filename
```

chmod

chapter 38

summary

This chapter looks at `chmod`, a UNIX (and Linux) command.

`chmod` is used to change the permissions for a file or directory.

The `chmod` command was described in the first UNIX book, *UNIX Programmer's Manual*, by Ken Thompson and Dennis Ritchie, published November 3, 1971.

wide open

The `chmod 777 filename` command will set the permissions so that *filename* is wide open to everyone.

```
$ chmod 777 filename
```

The file owner, the file owner's group, and other (or world) will all be able to read, write, delete, modify, and execute (run) the file to their heart's content. This access includes anyone who gets into your system through the internet.

other

On November 8, 2010, Ramesh Natarajan named this the number 32 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

chown

chapter 39

summary

This chapter looks at `chown`, a UNIX (and Linux) command.

`chown` is used to change the owner or group of a file.

The `chown` command was described in the first UNIX book, *UNIX Programmer's Manual*, by Ken Thompson and Dennis Ritchie, published November 3, 1971.

giving away a file

You can use the `chown` to change the ownership of a file or directory, giving ownership away to someone else.

The following example gives away ownership of the *filename* to the account *newowner*.

warning

Just read — do *not* type
this will give away your file and you have to use root to get it back

```
$ chown newowner filename
```

Of course, a system administrator can use root to freely change ownership of files and directories. This is a powerful tool in the hands of a system administrator.

security leak

This command is often limited to only root (or superuser) because if a computer system or server enforces limits on how much disk storage space each account is allowed, someone can set a file so they still can read and write it (and possibly execute it, if applicable), then change ownership to anyone else. This gets the file (or entire

directories) out of their storage limits, but they can still make use of the files.

other

On November 8, 2010, Ramesh Natarajan named this the number 33 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

shell levels and subshells

chapter 40

summary

This chapter looks at shell levels and subshells.

As you advance to more sophisticated operations, such as the material on [substitutions](#) and variables, you will find that the `bash` shell has levels.

Every program, command, or script that you run can have and modify variables. How does Unix/Linux keep programs, commands, and scripts from interfering with each others' variables?

The answer is shell levels. Each time the shell starts a program, command, or script, it starts it in a subshell. The subshell has its own variables and environment. It can't interfere with any other program, command, or script, even if they use the same name for a variable.

Most of the time this system is great. It can lead to frustration when attempting to share variables (you will have to use some work-around). And it can trip up beginners who aren't expecting this.

Technically, each subshell is run as a child process. We will discuss this more in the chapter on [processes](#).

shell levels

You can use the `$SHLVL` built-in variable to determine the current shell level.

In the following example, we will start up `bash` in a subshell. Yes, you can start-up another copy of `bash` from the current copy of `bash`.

This example includes some materials that will be covered in more detail in later chapters.

```
$ echo $SHLVL
1
$ bash
$ echo $SHLVL
2
$ exit
$ echo $SHLVL
1
$
```

The first `echo` command shows the current shell level (1).

The `bash` command starts up another copy of `bash` in a subshell.

The second `echo` command shows the subshell level (2).

The `exit` command closes down the copy of `bash` running in the child process and returns us to the main copy of `bash`.

The third `echo` command shows the original shell level (1).

substitutions

chapter 41

summary

This chapter looks at substitutions in UNIX (and Linux).

command substitutions
arithmetic substitutions

command substitutions

chapter 42

summary

This chapter looks at command substitutions in UNIX (and Linux).

command substitution

Command substitution is used to assign the output of a command to a variable.

Place the command in sideways ticks (```) around the command. Do not confuse these with regular single quotation marks (`'`).

You can place a simple command, a pipeline, or a command list inside the tick marks.

An example of a simple command:

```
$ DATE=`date`
```

An example of a pipeline:

```
$ CONSOLEUSER=`who | grep console`
```

An example of a command list:

```
$ FILEUSAGE=`date` ; df`
```

You can use command substitution to create parameters for other commands.

In the following example, the user name is used for `grep` word search of the file named `names`:

```
$ grep `id -un` names
```

You can use `$ ()` as a replacement for `` ``. If you nest backticks inside of each other, you need to escape the internal backticks. You do not need to escape nested `$ ()`.

```
$ DATEVAR=$(date)
$ echo $DATEVAR
$Mon Aug 26 19:35:47 PDT 2013
$
```

If there is only one level of nesting, some people use the convention of using `$ ()` for the outer expression and backticks (`` ``) for the inner expression.

arithmetic substitutions

chapter 43

summary

This chapter looks at arithmetic substitutions in UNIX (and Linux).

arithmetic substitution

You can use arithmetic substitution for quick integer arithmetic.

Place an integer arithmetic expression inside double parenthesis and place a dollar mark before the parenthesized expression (wow, that's a lot of words), **`$ ((expression))`**.

```
$(( 5 + 3 ))
```

You may use integer constants or integer variables:

```
$(( 5 + $z ))
```

You may post-increment, post-decrement, pre-increment, or pre-decrement variables:

```
$(( --x + z++ ))
```

You may use negative integers:

```
$(( -1 * -2 ))
```

You may use logical (!) and bitwise (~) negation:

```
$(( !1 * ~2 ))
```

The order of precedence (and complete list of possible operations):

operator	meaning
VAR++ VAR--	variable post-increment and pre-increment
++VAR --VAR	variable pre-increment and pre-decrement
- +	unary minus and plus
! ~	logical negation and bitwise negation
**	exponentiation
* / %	multiplication, division, and modulo
+ -	addition and subtraction
<< >>	left bitwise shift and right bitwise shift
<= >= < >	comparison operators
== !=	equality and inequality
&	bitwise AND
^	bitwise exclusive OR
	bitwise OR
&&	logical AND
	logical OR

expression ? expression : expression	C-style conditional evaluation
= *= /= %= += -= <<= >>= &= ^= !=	assignments
,	separator between expressions

Applying the precedence rules:

```
$(( (3 + 5*2) -8) /2 ))
```

The result for the above expression is 2. It is not 2.5 because this is integer arithmetic. It is not 4 because the multiplication has a higher precedence than addition.

You can have a raw expression, which is useful if it includes an assignment operator:

```
$ n=1
$ echo $n
1
$ (( n += 3 ))
$ echo $n
4
$
```

flow control

chapter 44

summary

This chapter looks at flow control in UNIX (and Linux).

The three basic kinds of instructions in structured programming are: sequence, decision, and loop.

A **sequence** is a series of instructions performed in the same order every time.

A **decision** makes a choice between two or more different possible sequences of instructions.

A **loop** repeats a sequence of instructions repeatedly.

The basic two flow control decision statements are `if` and `case`.

The basic three flow control loops are `while`, `for`, and `select`.

if

The basic format of the `if` statement:

```
if list1 ; then list2 ; elif list3 ; then list4 else list5 fi
```

case

The basic format of the `case` statement:

```
case expression in
    pattern1) list1 ;;
    ...
    patternN) listN ;;
esac
```

while

The basic format of the `while` loop:

```
while expression ; do list ; done
```

for

The basic format of the `for` loop:

```
for var in word1 ... wordN ; do list ; done
```

select

The basic format of the `select` loop:

```
select var in word1 ... wordN ; do list ; done
```

management tools

chapter 45

summary

This chapter looks at management tools for UNIX and Linux.

Every major version of UNIX and Linux includes several management tools. Some use a graphic interface, while others are accessed through the command line. Some management tools will even provide both a command line and a graphic interface.

Comparison chart

OS	Comprehensive	RAM	CPU	I/O	Network
AIX	nmon, topas, lparmon	vmstat, svmon	vmstat, sar	iostat, filemon	netstat, nfsstat
HP-UX	GlancePlus, MeasureWare/Perfview, Caliper	vmstat	top	iostat	netstat
RHEL	sysstat, systemTAP, oprofile	vmstat	top, mpstat	iostat	netstat, lperf
SLES	systat, SystemTap	vmstat	top, mpstat	iostat	netstat, lperf

Solaris	SE Toolkit, sysperfstat	vmstat	top	iostat	netstat
Tru-64	Collect, sys_check, HP inisght manager	vmstat	top	iostat	netstat

high availability

Some high availability tools for specific operating systems also have a Linux version.

Veritas for High Availability on Solaris also comes with a Linux client.

PowerHA (formerly known as HACMP) for IBM's AIX also is available in a Linux version.



chapter 46

summary

This chapter looks at `df`, a UNIX (and Linux) command.

`df` is used to display information on disk usage.

human readable

Use the `-h` or `-H` option to see space used in human readable format (such as kilobytes, megabytes, gigabytes, terabytes, petabytes, etc.). Both options do the same thing.

```
$ df -h
Filesystem      Size  Used Avail Capacity  Mounted on
/dev/disk0s10  149Gi  117Gi   32Gi    79%      /
devfs           111Ki  111Ki    0Bi   100%    /dev
fdesc           1.0Ki  1.0Ki    0Bi   100%    /dev
map -hosts       0Bi    0Bi    0Bi   100%    /net
map auto_home    0Bi    0Bi    0Bi   100%    /home
/dev/disk1s2    498Gi  40Gi  457Gi     9%    /Volumes/msdos
/dev/disk1s1    434Gi  81Gi  353Gi    19%    /Volumes/Mac
FreeAgent GoFlex Drive
$
```

The exact format of the human readable output will vary from system to system, but the columns are usually labelled (as in the Mac OS X example above). The *file system path* is a reference to a hard drive, storage device, network, or other location. The *mount point* is the location in the directory tree where you can find the file system.

Also note that adding the used and available space will not necessarily be an exact match with the total. One explanation is that a journaling system will account for up to 5% of the disk space.

type

Use the `-T` option to see the type of file system.

```
$ df -T
```

You can also provide specified filesystem types after the `-T` option to only show filesystems of the designated type. Use a comma separated list to provide multiple filesystem types. Pre-fix with `no` to show file systems other than the listed types.

As an example, the following command will display all file systems other than those of type NFS and MFS:

```
$ df -T nonfs,mfs
```

Use the `lsvfs` command to find out what types of filesystems are available on your computer or server.

differences between `du` and `df`

You may notice that `du` and `df` sometimes give very different numbers for the disk space on a production server. This rarely happens on a desktop or workstation. Usually `df` will output the bigger disk usage. This occurs when an inode is deallocated.

Some process has created a large temporary file and some other process has deleted it. The file remains in existence until the first process closes it, but the file system immediately removes access for any other process (to prevent all kinds of strange errors by accessing or manipulating non-existent files).

Running `ls -lsof | grep tmp` or `ls -lsof | grep deleted` will often reveal a large temporary file that accounts for the difference.

`du` and `df` should resolve back to the same results after the first process releases the file. If the problem persists, use `fsck` to fix it.

Again, note that adding the used and available space will not necessarily be an exact match with the total. One explanation is that a journaling system will account for up to 5% of the disk space.

blocksize

Use the `-b` or `-P` option to see use the default of blocks. This may be needed to override a `BLOCKSIZE` specification from the environment. In the early days of UNIX and Linux, the default block size was normally 512-bytes. In more modern

times the size of a block can be 1K, 8K, 32K, or even bigger.

```
$ df -b  
result in 512 byte blocks
```

Use the `-k` option to see use 1023-byte blocks. This is 1-Kbyte blocks.

```
$ df -k  
result in Kilo-byte blocks
```

Use the `-m` option to see use 1048576-byte blocks. This is 1-Mbyte blocks.

```
$ df -m  
result in Mega-byte blocks
```

Use the `-g` option to see use 1073741824-byte blocks. This is 1-Gbyte blocks.

```
$ df -g  
result in Giga-byte blocks
```

display inodes

Use the `-i` option to include statistics on the number of free inodes.

```
$ df -i
```

On Mac OS X, the additional columns are `iused`, `ifree`, and `%iused`.

local

Use the `-l` option to only display information about locally-mounted filesystems (no network filesystems).

```
$ df -l
```

long delay filesystems

Use the `-n` option to display previously obtained statistics. This is used when one or more filesystems are in a state where there will be a long delay to provide statistics.

```
$ df -n
```

other

On November 8, 2010, Ramesh Natarajan named this the number 25 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

du

chapter 47

summary

This chapter looks at `du`, a UNIX (and Linux) command.

`du` is used to display usage.

display usage

Use the `-a` option to see an entry for each file in the file hierarchy.

```
$ du -a
```

Note that if you run this from root, you will get a large report of every single file on all of the mounted hard drives. best to run it from a subdirectory.

total

Use the `-c` option to see a grand total.

```
$ du -c
```

kilobytes

Use the `-k` option to see the results listed in kilobytes.

```
$ du -k
```

You can use the [alias](#) command to modify the `du` so that it always displays the file information in kilobytes.

```
$ alias du=du -k
```

If you need to use the unmodified version of this now aliased command, simply type a slash (`\`) in front of the `du` command.

```
$ \du
```

A better alternative is to use an alternate spelling, such as `duk` for your alias. Any scripts that rely on the unmodified version of an aliased `du` are likely to fail or produce strange results because of your alias.

```
$ alias duk=du -k
```

processes

chapter 48

summary

This chapter looks at UNIX (and Linux) processes.

The UNIX term process is pretty much the same as the terms job or task on other operating systems.

multi-tasking

UNIX is a multi-processing operating system. This means that it runs more than one task (or job or process) at a time. On a multi-processor computer it is possible for UNIX to literally run multiple processes at the exact same time. On a single processor computer different processes are swapped into the main CPU (central processing unit) so fast that it gives the illusion that multiple processes are running simultaneously.

One of the reasons that multitasking works is that the processor runs much faster than input/output or mass storage devices (and on modern computers often runs much faster than main memory). Whenever a process has to stop for input, output, or mass storage, there is a convenient moment for the operating system to switch to a different process that is ready to run rather than leave the CPU sitting idle waiting for the I/O to occur.

init

The first process to start running on a traditional UNIX computer is `init`. Some modern variations, such as Linux, may have a few other processes run first, especially if the computer or server supports multiple operating systems.

`init` starts a series of other processes (in UNIX, this is called spawning). Some of these processes only run during boot-up, while others are intended to run as long as the computer is running.

By the time a human user can login to the system, many processes are running.

`init` is ultimate ancestor process of all other processes in a UNIX system.

process ID

Every process on UNIX (or Linux) has a unique process identification number, called the process ID.

A system administrator uses the process IDs to control the processes.

kill

One useful command available for the system administrator is the `kill` command, which stops a process and removes it from the system.

An ordinary user can only `kill` his or her own processes.

A system administrator running as root (including using `sudo`) can use `kill` on any process on the entire system.

See the chapter on [kill](#) for more information.

ps

chapter 49

summary

This chapter looks at `ps`, a UNIX (and Linux) command.

`ps` gives information about running processes.

info on processes

Type `ps` followed by the option `-a` (for “all”). An optional pipe to `more` or `less` will provide one page of info at a time.

```
$ ps -a |more
```

`ps` can be used to monitor the use of a server or system.

`ps` can be used to find processes that are stuck, which can then be [killed](#).

monitor processes

`ps -ax` will provide information on most running processes. You can use the command to establish the baseline performance for your server and to monitor errant processes.

```
$ ps -ax
```

full information

Type `ps` followed by the `-ef` options to see most of the available information on processes.

```
$ ps -ef |less
```

On a Solaris system you will want to use the `-aux` options.

```
$ ps -aux |less
```

searching for specific content

You can use the following example to monitor a specific string or name from the overall output (where *term* is replaced with the specific string or name you want):

```
$ ps -ef|grep term
```

daemons

On Linux you use the following to get information on core processes and daemons:

```
$ /sbin/chkconfig --list
```

load balancing

Most of the daily work for a system administrator is making sure that system resources aren't overloaded so that everything runs smoothly.

Sometimes a program will hog the CPU. This may be due to an infinite loop, repeatedly forking itself, or other bug, or it can be due to the nature of the processing being done.

In either case, the system administrator can use the `nice` command to adjust the CPU priority for each running process so that the entire system runs smoothly.

other

On November 8, 2010, Ramesh Natarajan named this the number 22 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

kill

chapter 50

summary

This chapter looks at `kill`, a Unix (and Linux) command.

`kill` is used to send signals to a process, most often to stop processes.

`kill` is a builtin command in `cs`. There is also an external utility with the same name and functionality.

which processes can be killed

An ordinary user can only `kill` his or her own processes.

A system administrator running as root (including using `sudo`) can use `kill` on any process on the entire system.

frozen process

Sometimes a process (particularly web browsers) will freeze up. The `kill` command can be used to remove the frozen program from the system.

If a user finds their display locked up because of a frozen program, he or she can `login` to another computer, then `login` to the original system using `rlogin`, and then use the `kill` command to stop the offending process using the specific process ID.

killall

`killall` is a related command. `killall program_name` will stop all processes with the program name, so the more specific `kill` with a specific process ID is usually used first.

process isolation

Unix does a very good job of keeping processes isolated from each other, so that no rogue process can attack or damage any other process.

Unlike Windows, a frozen or crashed program on UNIX or Linux shouldn't be able to bring the entire operating system to a halt.

Most Unix vendors carefully test their own system software and most of the system software has been running and tested for decades, so those programs rarely cause problems.

Most bugs occur in third party software and in custom software developed for a particular installation.

remove background process or job

The most common use of `kill` is simply to remove a process or job. This is done by naming the PID of the process (which is usually obtained with [ps](#)).

```
$ kill PID
```

This works because the default signal is `SIGTERM` (terminate the process).

discover signals

You will find a [chart of signals](#) with the common signals for Linux, Mac OS X, and Solaris.

You can also discover the list for your system by running `kill` with the `-l` (lower case L) option.

```
$ kill -l
```

You can determine a specific signal with the `-l` option and a signal number.

```
$ kill -l 3
QUIT
$
```

Some operating systems give the entire signal name with the `SIG` prefix (such as `SIGQUIT`) and some give just the signal name (such as `SIGQUIT`).

testing

You can test the capabilities of your programs and scripts under abnormal coonditions by using `kill` to send a specific signal.

```
$ kill -s SIGNAME PID
```

The signal name (*SIGNAME*) can be the signal number or the signal name. The signal name can be either the signal name with or without the SIG prefix.

You may also simply enter the signal number or signal name (with or without the SIG prefix) as an option.

```
$ kill -6 PID  
$ kill -SIGIOT PID  
$ kill -IOT PID
```

other

On November 8, 2010, Ramesh Natarajan named this the number 26 most frequently used Unix/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

nice

chapter 51

summary

This chapter looks at `nice`, a UNIX (and Linux) command.

load balancing

Most of the daily work for a system administrator is making sure that system resources aren't overloaded so that everything runs smoothly.

Sometimes a program will hog the CPU. This may be due to an infinite loop, repeatedly forking itself, or other bug, or it may be due to the nature of the processing being done.

In either case, the system administrator can use the `nice` command to adjust the CPU priority of each running process so that the entire system runs smoothly.



chapter 52

summary

This chapter looks at `w`, a UNIX (and Linux) command.

`w` gives information about current activity on the system, including what each user is doing.

Not to be confused with `who`, which displays users, but not the processes they are running.

info

Type `w`:

```
$ w
```

`w` does *not* provide information on background processes, which typically account for most of the server usage.

date

chapter 53

summary

This chapter looks at `date`, a UNIX (and Linux) command.

`date` is used to set or view the system date and time.

```
$ date
Mon Sep  3 00:56:17 PDT 2012
$
```

The format for the output is: day of the week, month, day of the month, 24 hour time, time zone, year.

formatted output

Display the time and/or date with formatting by including formatting options (which can be used to set variables to a specific format).

```
$ date '+DATE: %m/%d/%y\nTIME: %H:%M:%S'
DATE: 11/23/13
TIME: 22:12:19
$
```

Setting a variable with the current date:

```
$ NOW=$(date +"%m/%d/%Y")
$ echo $NOW
11/23/2013
$
```

Format specifiers (format string starts with +)

Specifier	Description	Values or example
Day		
%a	weekday, abbreviated	Sun
%A	weekday, full	Sunday
%d	day of the month, two digits, zero filled	08
%e	day of the month	8
%j	day of year, zero filled	001-366
%u	day of week from Monday to Sunday	1-7
%w	day of week from Sunday to Saturday	0-6
Week		
%U	week number, Sunday as first day of week	00-53
%W	week number, Monday as first day of week	00-53
%V	ISO standard week of the year	01-53
Month		
%m	two-digit month number	01-12
%h	month name, abbreviated	Nov
%b	month name, localised abbreviation	Nov
%B	locale's full month, variable length	November
Year		
%y	two-digit year	00-99
%Y	four-digit year	2013
	two-digit year corresponding to	

%g	the %V week number	
%G	four-digit year corresponding to the %V week number	
Century		
%C	two century digits from year	00-99
Date		
%D	<i>mm/dd/yy</i>	11/24/13
%x	locale's date representation	11/24/2013
%F	%Y-%m-%d	2013-11-24
Hours		
%l	hour (12 hour)	4
%I	hour (12 hour), zero-filled	04
%k	hour (24 hour)	4
%H	hour (24 hour), zero-padded	04
%p	locale's upper case AM or PM (blank in many locales)	AM
%P	locale's lower case <i>am</i> or <i>pm</i>	am
Minutes		
%M	two-digit minute number	05
Seconds		
%s	seconds since 00:00:00 1970-01-01 UTC (Unix epoch)	1385265929
%S	two-digit second number	00-60 (Includes 60 to accommodate a leap second)
%N	nanoseconds	000000000-999999999

Time		
%r	hours, minutes, seconds (12-hour clock)	04:05:29 AM
%R	hours, minutes (24 hour clock)	04:05
%T	hours, minutes, seconds (24-hour clock)	04:05:29
%X	locale's time representation	11:07:26 AM
Date and time		
%C	locale's date and time	Sat Nov 04 12:02:33 EST 1989
Time zone		
%z	RFC-822 style numeric time zone	-0500
%Z	time zone name; nothing if no time zone is determinable	EST, EDT

literals: %n newline %% percent %t horizontal tab

By default, `date` normally fills numeric fields with zeroes. GNU `date`, but not BSD `date`, recognizes a modifier between the per cent sign (%) and the format specifier:

- hyphen (-): do not fill the field
- underscore (_): pad the field with spaces

`TZ` Specifies the time zone, unless overridden by command line parameters. If neither is specified, the setting from `/etc/localtime` is used.

setting time and date

Only the root or superuser can set the system date and time. In Mac OS X, you can use the clock system preferences to set the time and date. In Ubuntu-based Linux, you can click on the clock and select Time and Date settings from the menu or click on the System menu, select Administration, select Time and Date.

Set the time to noon:

```
$ date 1200
$
```

Set the time to 3:30:30 a.m.:

```
$ date 0330.30
$
```

Set the date to October 31st (Halloween) at 3:30 a.m.:

```
$ date 10310330
$
```

other

On November 8, 2010, Ramesh Natarajan named this the number 49 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

uname

chapter 54

summary

This chapter looks at `uname`, a UNIX (and Linux) command.

`uname` is used to report system information.

On a Linux machine you can find all of this same information in the appropriate files in the `/proc` filesystem, but `uname` utility may be easier and faster to use.

basic use

Type the `uname` without any options to get the kernel name.

```
$ uname  
Darwin
```

system

Use the `-s` option to get the operating system name.

```
$ uname -s  
Darwin
```

release info

Use the `-r` option to get the operating system release information.

```
$ uname -r  
9.8.0
```

operating system version

Use the `-v` option to get the operating system version.

```
$ uname -v  
Darwin Kernel Version 9.8.0: Wed Jul 15 16:57:01 PDT 2009;  
root:xnu-1228.15.4~1/RELEASE_PPC
```

machine

Use the `-m` option to get the machine hardware name.

```
$ uname -m  
Power Macintosh
```

When running on an Intel (or compatible) processor, you may also get an indication as to whether it is a 32-bit or 64-bit system.

```
$ uname -m  
x86_64
```

processor

Use the `-p` option to get the machine processor architecture type.

```
$ uname -p  
powerpc
```

network node

Use the `-n` option to get the network node host name (node name).

```
$ uname -n  
local
```

You can also use the `hostname` command to get the exact same answer.

all

Use the `-a` option to get all of the information available from this command.

```
$ uname -a  
Darwin admins-power-mac-g5.local 9.8.0 Darwin Kernel Version  
9.8.0: Wed Jul 15 16:57:01 PDT 2009; root:xnu-1228.15.4~1/RELEASE_PPC  
Power Macintosh
```

nonstandard

There are a few additional nonstandard options that may be available. Even if available, they may produce `unknown` as their output. Because these are nonstandard options, you should avoid using them in a script.

Use the `-i` option to get hardware platform information.

```
$ uname -i  
x86_64
```

Use the `-o` option to get the operating system name.

```
$ uname -o  
GNU/Linux
```

CentOS and Red Hat Enterprise

You can find the distribution version number for CentOS or red hat Enterprise Linux with the following command:

```
$ cat /etc/redhat-release  
CentOS release 5.4 (Final)
```

other

On November 8, 2010, Ramesh Natarajan named this the number 37 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

uptime

chapter 55

summary

This chapter looks at `uptime`, a UNIX (and Linux) command.

`uptime` gives information about your server's total uptime statistics.

info

Type `uptime`:

```
$ uptime
20:03 up 1:43, 2 users, load averages: 0.94 0.82 0.78
$
```

`uptime` tells you how long your server has been running. `uptime` also gives the average system load for the last few minutes. Use `uptime` for a quick performance check. Collect daily data to watch for problems from underpowered CPUs or memory management.

top

chapter 56

summary

This chapter looks at `top`, a UNIX (and Linux) command.

`top` gives the top processes (the default is by CPU usage).

using top

Type `top` and ENTER or RETURN.

```
$ top
```

You will get updated reports (typically, once per second) on the active processes, load average, CPU usage, shared libraries, and memory usage (regions, physical, and virtual).

Type `q` to stop the `top` program.

other

On November 8, 2010, Ramesh Natarajan named this the number 24 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

lsof

chapter 57

summary

This chapter looks at `lsof`, a UNIX (and Linux) command.

`lsof` lists open files (and that includes devices, directories, pipes, nodes, sockets, and anything else that UNIX treats as a file).

`lsof` will give you information on any opened files (including all of the items UNIX treats as a file).

basic use

Type `lsof` all by itself to get a list of all open files belonging to all active processes. The list was huge when creating this example, so I have edited it to highlight some of the things listed.

```
$ lsof
COMMAND  PID  USER  FD      TYPE  DEVICE  SIZE/OF  NODE
NAME
  loginwind  24  admin  cwd      DIR    14,8    1564      2 /
  loginwind  24  admin  txt      REG    14,8   946736
1076582
/System/Library/CoreServices/loginwindow.app/Contents/MacOS/loginwindow
  loginwind  24  admin   0r      CHR     3,2       0t0 35264644
/dev/null
  loginwind  24  admin   1       PIPE 0x224f3f0    16384
  loginwind  24  admin   2       PIPE 0x224f3f0    16384
  loginwind  24  admin   3u      unix 0x27766e8       0t0 -
>0x224cdd0
  launchd    68
admin      3u  KQUEUE
  launchd    68  admin   5u      systm 0x25f1264
0t0        [1:1:0]
  launchd    68  admin   15      PIPE 0x224f6ac    16384
  launchd    68  admin   19r     DIR    14,8     1122     248
/Library/Preferences
  AirPort    84  admin  cwd      DIR    14,8     1564      2 /
  AirPort    84  admin  txt      REG    14,8   573072  3265433
```

```

/System/Library/CoreServices/AirPort Base Station
Agent.app/Contents/MacOS/AirPort Base Station Agent
  Spotlight  88 admin  cwd      DIR      14,8      1564      2 /
  Spotlight  88 admin  txt      REG      14,8      708848    1067264
/System/Library/CoreServices/Spotlight.app/Contents/MacOS/Spotlight
  UserEvent  89 admin  cwd      DIR      14,8      1564      2 /
  Dock       90 admin  cwd      DIR      14,8      1564      2 /
  Dock       90 admin  txt      REG      14,8      2384752   1046722
/System/Library/CoreServices/Dock.app/Contents/MacOS/Dock
  Dock       90
admin       4u  KQUEUE                                count=0, state=0x2
  ATSServer  91 admin  cwd      DIR      14,8      1564      2 /
  ATSServer  91 admin  txt      REG      14,8      5787888   1131290
/System/Library/Frameworks/ApplicationServices.framework/
Versions/A/Frameworks/ATS.framework/Versions/A/Support/ATSServer
  pboard     92 admin  cwd      DIR      14,8      1564      2 /
  SystemUIS  94 admin  cwd      DIR      14,8      1564      2 /
  Finder     96 admin  cwd      DIR      14,8      1564      2 /
  iTunesHel 115 admin  cwd      DIR      14,8      1564      2 /
  Tex-Edit   146 admin  cwd      DIR      14,8      1564      2 /
  Tex-Edit   146 admin  txt      REG      14,8      367168    1045618
/System/Library/CoreServices/Encodings/libTraditionalChineseConverter.dylib
  firefox-b 149 admin  cwd      DIR      14,8      1564      2 /
  firefox-b 576 admin  56u      IPv4 0x4984e64      0t0      TCP
192.168.0.108:60388
->173.194.57.119:http (ESTABLISHED)

```

The default is one file per line. The FD column gives the file descriptor and the TYPE column gives the file type. The other columns should make sense.

Some of the common FD values are:

- cwd = Current Working Directory
- mem = memory mapped file
- mmap = memory mapped device
- rtd = root directory
- txt = text file
- NUMBER = file descriptor. The character after the number indicates the mode in which the file is opened. r = read, w = write, and u = both read and write. This may be followed by lock information.

Some of the common TYPE values are:

- BLK = block special file
- CHR = character special file
- DIR = directory
- FIFO = First In First Out special file
- IPv4 = IPv4 socket
- IPv6 = IPv6 socket
- LINK = symbolic link file
- PIPE = pipe
- REG = regular file

- `unix` = UNIX domain socket

find which process opened a file

You can get information on which processes opened a specific file by giving the filename as an argument.

```
$ lsof /System/Library/Fonts/Helvetica.dfont
loginwind  24 admin  txt    REG    14,8   2402112 10720
/System/Library/Fonts/Helvetica.dfont
ATSServer   90 admin  txt    REG    14,8   2402112 10720
/System/Library/Fonts/Helvetica.dfont
Tex-Edit   123 admin  txt    REG    14,8   2402112 10720
/System/Library/Fonts/Helvetica.dfont
firefox-b  576 admin  txt    REG    14,8   2402112 10720
/System/Library/Fonts/Helvetica.dfont
```

find any open file by name

To find any open file, including an open UNIX domain socket file, with the name `/dev/log`, type `lsof /dev/log`. (from the man pages)

```
$ lsof /dev/log
```

list opened files in directory

To list all the processes that have opened files in a particular directory, use the `+d` option.

```
$ lsof +d /u/abe/foo/
```

To list all the processes that have opened files in a particular directory and all of its child directories (subdirectories), use the `+D` option. `lsof` will recurse through all subdirectories.

```
$ lsof +D /var/
COMMAND  PID  USER   FD   TYPE DEVICE  SIZE/OFF  NODE NAME
loginwind  24  admin  txt    REG   14,8 149168128 1137272
/private/var/db/dyld/dyld_shared_cache_ppc
loginwind  24  admin   4u    REG   14,8      2512 3589022
/private/var/run/utmpx
launchd   64  admin  txt    REG   14,8 149168128 1137272
/private/var/db/dyld/dyld_shared_cache_ppc
<listing continues>
```

list open directory

To list the process that has `/u/abe/foo` open, type `lsof /u/abe/foo`. (from the man pages)

```
$ lsof /u/abe/foo
```

list by process names

To list all open files by process names starting with particular strings, use the `-c` option, followed by the process name. You can give multiple `-c` switches on a single command line.

Note that this option does not look for an exact match, but any process that includes the character string as a substring of the process name. So, `sh` would find `ssh` and `sh`

```
$ lsof -c Terminal
COMMAND  PID  USER  FD  TYPE  DEVICE  SIZE/OFF      NODE NAME
Terminal 168  admin cwd   DIR   14,8          918    547359
/Users/admin
Terminal 168  admin txt    REG   14,8 10244512   1048543
/usr/share/icu/icudt36b.dat
Terminal 168  admin 0r     CHR    3,2           0t0 35027076
/dev/null
Terminal 168  admin 1     PIPE 0x22374b4    16384
Terminal 168  admin 2     PIPE 0x22374b4    16384
< listing continues >
```

list by particular login names

To list all of the files opened by a specific user, type the `-u` option.

```
$ lsof -u jill
```

To list all of the files opened by several specific users, use a comma delimited list.

```
$ lsof -u jack,jill
```

To list all of the files opened by every user other than a specific user, use the `^` character. You can use a comma delimited list

```
$ lsof -u ^jack,jill
```

list by particular process

To list all of the files opened by a particular process, type the `-p` option.

```
$ lsof -p 1234
```

list particular login names, user IDs, or process numbers

To list all open files for any and all of: login name *abe*, or user ID *1234*, or process *456*, or process *123*, or process *789*, type `lsof -p 456,123,789 -u 1234,abe`. (from the man pages)

```
$ lsof -p 456,123,789 -u 1234,abe
```

list by mount point

Sometimes when you attempt to unmount a device or directory, the system will warn you with the “Device or resource Busy” error.

You can list all of the processes using a mount point and then kill those processes so that you can unmount the device or directory.

```
$ lsof /home
```

An equivalent option is:

```
$ lsof +D /home/
```

list by device

To list all open files on device */dev/hd4*, type `lsof /dev/hd4`. (from the man pages)

```
$ lsof /dev/hd4
```

kill process

To kill the process that has */u/abe/foo* open (by sending the signal `SIGHUP`), type

```
kill -HUP `lsof -t /u/abe/foo`. (from the man pages)
```

```
$ kill -HUP `lsof /u/abe/foo`
```

Notice that those are back ticks.

You can also kill all processes that belong to a specific user by using the `-t` option to output only the process ID and pass that result on to `kill`.

```
$ kill -9 `lsof -t -u jill`
```

AND/OR

`lsof` defaults to logical OR of all options. The following example (from the man pages) will list all of the files open from all three listed processes and from both users.

```
$ lsof -p 456,123,789 -u 1234,abe
```

Use the `-a` option to perform a logical AND on the user names, processes, etc. Note that you either OR the entire line or AND the entire line. You can not mix AND and OR together in a single `lsof` command. The `^` negation on login name or user ID, process ID, or process group ID options are evaluated prior to other selection criteria and therefore don't get included in AND or OR for `lsof`. Although the `-a` is legal in any position, placing it between a pair of items does not cause just those two items to be ANDed, the entire line is still ANDed.

The following AND example will produce a listing of only UNIX socket files that belong to processes owned by the user *foo*.

```
$ lsof -a -U -ufoo
```

timed listings

You can gather information at specific time intervals. To list the files at descriptors 1 and 3 of every process running the `lsof` command for login *abe* every 10 seconds, type `lsof -c lsof -a -d 1 -d 3 -u abe -r10`. (from the man pages)

```
$ lsof -c lsof -a -d 1 -d 3 -u abe -r10
```


Use the `+r` or `-r` options for timed repeats. The `+r` switch will stop when no open files that meet the selected criteria are open. The `-r` will continue until interrupted by a signal. The number after the `r` is the time in seconds for each delay.

Between each cycle, `lsOf` will print a sequence of equal signs (`=====`).

```
=====
```

internet connections

Because UNIX and Linux (and Mac OS X) treat internet connections as files, you can use the `-i` switch to view all of your open internet connections.

```
$ lsOf -i
COMMAND  PID  USER  FD  TYPE  DEVICE  SIZE/OFF  NODE  NAME
SystemUIS  93  admin  10u  IPv4  0x2152f48      0t0  UDP  *:*
```

COMMAND	PID	USER	FD	TYPE	DEVICE	SIZE/OFF	NODE	NAME
firefox-b	127	admin	75u	IPv4	0x43c5270	0t0	TCP	
192.168.0.108:49816								
->63.141.192.121:http (CLOSE_WAIT)								
Fetch	294	admin	23u	IPv4	0x27ffe64	0t0	TCP	
192.168.0.108:50539								
->reliant.websitewelcome.com:ftp (ESTABLISHED)								
Fetch	294	admin	24u	IPv4	0x2d2be64	0t0	TCP	
192.168.0.108:50541								
->reliant.websitewelcome.com:36975 (LAST_ACK)								
Fetch	294	admin	25u	IPv4	0x444a66c	0t0	TCP	
192.168.0.108:50542								
->reliant.websitewelcome.com:22271 (TIME_WAIT)								

internet files

To list all open Internet, x.25 (HP-UX), and UNIX domain files, type `lsOf -i -U`. (from the man pages)

```
$ lsOf -i -U
```

IPv4 network files by PID

To list all open IPv4 network files in use by the process whose PID is `1234`, type `lsOf -i 4 -a -p 1234`. (from the man pages)

```
$ lsOf -i 4 -a -p 1234
```

IPv6 files

To list all open IPv6 network files (assuming your UNIX system supports IPv6), type `lsof -i 6`. (from the man pages)

```
$ lsof -i 6
```

list by port

List all of the processes that are listening to a particular port by using colon (:) followed by the port number(s).

```
$ lsof -i:21
```

To list all files using any protocol on ports *513*, *514*, or *515* of host *wonderland.cc.purdue.edu*, type `lsof -i @wonderland.cc.purdue.edu:513-515`. (from the man pages)

```
$ lsof -i @wonderland.cc.purdue.edu:513-515
```

list TCP or UDP connections

List all of the TCP connections:

```
$ lsof -i tcp
```

List all of the UDP connections:

```
$ lsof -i udp
```

list from default domain

Assuming a default domain of *cc.purdue.edu*, list all files using any protocol on any port of *mace.cc.purdue.edu*, type `lsof -i @mace`. (from the man pages)

```
$ lsof -i @mace
```

socket files

To find an IP version 4 socket file by its associated numeric dot-form address, type `lsof -i@128.210.15.17`. (from the `man` pages)

```
$ lsof -i@128.210.15.17
```

To find an IP version 6 socket file by its associated numeric colon-form address, type `lsof -i@[0:1:2:3:4:5:6:7]`. (from the `man` pages)

```
$ lsof -i@[0:1:2:3:4:5:6:7]
```

To find an IP version 6 socket file by its associated numeric colon-form address that has a run of zeros in it (such as the loop-back address), type `lsof -i@[::1]`. (from the `man` pages)

```
$ lsof -i@[::1]
```

Network File System (NFS)

List all of the Network File System (NFS) files by using the `-N` switch.

```
$ lsof -N
```

To find processes with open files on the NFS file system named `/nfs/mount/point` whose server is inaccessible (assuming your mount table supplies the device number for `/nfs/mount/point`), type `lsof -b /nfs/mount/point`. (from the `man` pages)

```
$ lsof -b /nfs/mount/point
```

To do the preceding search with warning messages suppressed, type `lsof -bw /nfs/mount/point`. (from the `man` pages)

```
$ lsof -bw /nfs/mount/point
```

ignore device cache file

To ignore the device cache file, type `lsof -Di`. (from the `man` pages)

```
$ lsof -Di
```

obtain specific multiple info on each file

You can combine flags to gather specific information. To obtain the PID and command name field for each process, file descriptor, file device number, and file inode number for each file of each process, type `lsOf -FpCfDi`. (from the `man` pages)

```
$ lsOf -FpCfDi
```

using regular expressions

To list the current working directory of procoesses running a command that is exactly four characters long and has an upper or lower case “O” or “o” in character position three, type `lsOf -c /^..o.$/i -a -d cwd`. (from the `man` pages)

```
$ lsOf -c /^..o.$/i -a -d cwd
```

free

chapter 58

summary

This chapter looks at `free`, a Linux command.

`free` is used to show free memory.

`free` displays the total amount of free and used physical memory and swap space in the system, as well as the buffers and cache consumed by the kernel.

size

The default is to report the memory size in bytes. Use the `-g` option to display in Gigabytes. Use the `-m` option to display in Megabytes. Use the `-k` option to display in Kilobytes. Use the `-b` option to display in Bytes.

total

Use the `-t` option to view total memory.

low/high

Use the `-l` option to view low vs. high memory usage.

count

The default is to display the information once and then return to the normal shell. Use the `-s n` option (where *n* is the number of times to display) to keep displaying the memory usage (until interrupted). Use the `-c n` or `--count=n` options (where *n* is the number of times to display the memory statistics).

Mac OS X

Use the Activity Monitor for this purpose. From the command line, you can get similar results from `vm_stat`. `vm_stat` is a Mach-specific version of the UNIX command `vmstat` Also:

```
$ echo -e "\n$(top -l 1 | awk '/PhysMem/';)\n"
```

other

On November 8, 2010, Ramesh Natarajan named this the number 23 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

vmstat

chapter 59

summary

This chapter looks at `vmstat`, a UNIX (and Linux) command.

`vmstat` is used to show virtual memory usage.

usage

Type `vmstat` to see a list of virtual memory statistics. Especially useful in a virtualized environment.

```
$ vmstat
```

Mac OS X

`vm_stat` is a Mach-specific version of the UNIX command `vmstat`:

```
$ vm_stat
```

```
Mach Virtual Memory Statistics: (page size of 4096 bytes)
Pages free:                5538.
Pages active:              142583.
Pages inactive:            76309.
Pages wired down:          37531.
"Translation faults":      4427933.
Pages copy-on-write:        54807.
Pages zero filled:         3086159.
Pages reactivated:         6533.
Pageins:                   46357.
Pageouts:                  4453.
Object cache: 66465 hits of 76770 lookups (86% hit rate)
```

polkit

chapter 60

summary

This chapter looks at `polkit`, a UNIX (and Linux) command.

`polkit` is used to control system-wide privileges.

running privileged commands

&`polkit` can be used to run privileged commands by typing `pkexec`, followed by the intended command:

```
$ pkexec cat README
```

sudo alternative

It is generally recommended to use `sudo` rather than `pkexec`, because `sudo` provides greater flexibility and security.

Mac OS X

While `polkit` is *not* part of the official Mac OS X release from Apple, it can be installed on mac OS X.

security

`pkexec` never does any validation of the ARGUMENTS passed to a program.

graphic programs

X11 (and other graphic) programs won't run by default with `polkit` because the `$DISPLAY` environment variable is not set. The following information from the

`pkexec` manual describes how to set `pkexec` so that it can run a graphic program.

To specify what kind of authorization is needed to execute the program `/usr/bin/pk-example-frobnicate` as another user, simply write an action definition file like this

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE policyconfig PUBLIC
"-//freedesktop//DTD PolicyKit Policy Configuration 1.0//EN"
"http://www.freedesktop.org/standards/PolicyKit/1/policyconfig.dtd">
<policyconfig>

  <vendor>Examples for the PolicyKit Project</vendor>
  <vendor_url>http://hal.freedesktop.org/docs/PolicyKit/</vendor_url>

  <action id="org.freedesktop.policykit.example.pkexec.run-frobnicate">
    <description>Run the PolicyKit example program Frobnicate</description>
    <description xml:lang="da">Kør PolicyKit eksemplet Frobnicate</description>
    <message>Authentication is required to run the PolicyKit example program
Frobnicate</message>
    <message xml:lang="da">Autorisering er påkrævet for at afvikle PolicyKit eksemplet
Frobnicate</message>
    <icon_name>audio-x-generic</icon_name>
    <defaults>
      <allow_any>no</allow_any>
      <allow_inactive>no</allow_inactive>
      <allow_active>auth_self_keep</allow_active>
    </defaults>
    <annotate key="org.freedesktop.policykit.exec.path">/usr/bin/pk-example-
frobnicate</annotate>
  </action>

</policyconfig>
```

and drop it in the `/usr/share/polkit-1/actions` directory under a suitable name (e.g. matching the namespace of the action). Note that in addition to specifying the program, the authentication message, description, icon and defaults can be specified. For example, for the action defined above, the following authentication dialog will be shown:

[IMAGE][2]

[illegible]

If the user is using the `da_DK` locale, the dialog looks like this:

[IMAGE][3]

Autorisering		[X]
[Icon]	Autorisering er påkrævet for at afvikle PolicyKit eksemplet Frobnicate	
	Et program forsøger at udføre en handling der kræver privilegier. Autorisering er påkrævet.	
	Kodeord: []

```

[V] Detaljer:
Bruger: Super User (root)
Program: /usr/bin/pk-example-frobnicate
Handling: org.fid.pk.example.pkexec.run-frobnicate
Vendor: Examples for the PolicyKit Project

[Annullér] [Autorisering]
+-----+

```

Note that pkexec does no validation of the ARGUMENTS passed to PROGRAM. In the normal case (where administrator authentication is required every time pkexec is used), this is not a problem since if the user is an administrator he might as well just run pkexec bash to get root.

However, if an action is used for which the user can retain authorization (or if the user is implicitly authorized), such as with pk-example-frobnicate above, this could be a security hole. Therefore, as a rule of thumb, programs for which the default required authorization is changed, should never implicitly trust user input (e.g. like any other well-written suid program).

defaults

chapter 61

summary

This chapter looks at `defaults`, a Mac OS X command.

`defaults` is used to read, write, or delete defaults from a command line shell.

defaults options

Mac OS X programs use the defaults system to record user preferences and other information. Most of the information is more easily accessed through the application's Preferences panel, but some information is normally inaccessible to the end user.

Note: Since applications do access the defaults system while they're running, you shouldn't modify the defaults of a running application.

All programs share the defaults in **NSGlobalDomain**. If the program doesn't have its own default, it uses the value from the **NSGlobalDomain**.

screencapture defaults

The following methods use Terminal to change the default file format and location where the screenshot is saved from the graphic user interface.

In Mac S X 10.4 (Tiger) or more recent, the default screencapture format can be changed in Terminal by using the `defaults` command. In Mac S X 10.4 (Tiger), the new default does not take effect until you logout and log back in (from the entire computer, not just from Terminal — a full restart will also work) unless you also use the `killall` command.

```
$ defaults write com.apple.screencapture type ImageFormat; killall  
SystemUIServer
```

The *FileFormat* can be png (Portable Network Graphic), pdf (Portable Document Format), tiff (Tagged Image File Format), jpg or jpeg (Joint Photographic Experts Group), pict (Macintosh QuickDraw Picture), bmp (Microsoft Windows Bitmap), gif (Graphics Interchange Format), psd (Adobe Photoshop Document), sgi (Silicon Graphics File Format), or tga (Truevision Targe File Format).

JPGs are saved at quality 60%.

To change the default location where the screenshot file is saved (the default is Desktop), use the following Terminal command (where *pathname* is the full path to a directory.):

```
$ defaults write com.apple.screencapture location PathName;  
killall SystemUIServer
```

The normal default location would be reset with the following command (where *Username* is the current account's user name).

```
$ defaults write com.apple.screencapture location  
/Users/UserName/Desktop; killall SystemUIServer
```

dock defaults

Use the following commands to change the 3D Dock of Mac OS X Lion back to the 2D look. The `killall` restarts the Dock so that the change takes effect right away.

```
$ defaults write com.apple.dock no-glass -boolean YES; killall  
Dock
```

Return to the 3D look with the following commands:

```
$ defaults write com.apple.dock no-glass -boolean NO; killall Dock
```

Use the following commands to add a gradient behind an icon in a Dock Stack in Mac OS X:

```
$ defaults write com.apple.dock mouse-over-hilte-stack -boolean  
YES; killall Dock
```



Use the following commands to add a small Exposé button to the upper right of your Mac OS X screen. Clicking on the Exposé button will show all of the windows from the current application (same as the normal F10 default) and option clicking the Exposé button will show all windows from all programs (same as the normal F9 default). This will work even if you reconfigure the F9 and F10 keys to do something else.

```
$ defaults write com.apple.dock wvous-floater -bool YES; killall Dock
```

Use the following commands to remove the small Exposé button.

```
$ defaults write com.apple.dock wvous-floater -bool NO; killall Dock
```



login defaults

Use the following command to add a message to your Login window. Replace *message* with a short message. Keep the message short. As always with the `sudo` command, type very carefully.

```
$ sudo defaults write /Library/Preferences/com.apple.loginwindow LoginwindowText "message"
```

To remove the login message, type the following:

```
$ sudo defaults write /Library/Preferences/com.apple.loginwindow LoginwindowText ""
```

showing dot files

The Mac OS X Finder hides all files that start with the period or dot character. This matches the standard behavior of `ls` in UNIX, where a leading dot is used as an indicator of a hidden file.

To have Finder always show all files, including hidden files, type:

```
$ defaults write com.apple.Finder AppleShowAllFiles YES; killall  
Finder
```

To restore Finder to its default behavior, type:

```
$ defaults write com.apple.Finder AppleShowAllFiles NO; killall  
Finder
```

DS_Store files

To prevent Mac OS X from creating `.DS_Store` files on network shares (and everywhere else), type:

```
$ defaults write com.apple.desktopservices  
DSDontWriteNetworkStores true
```

To restore Mac OS X from creating `.DS_Store` files on network shares (and everywhere else), type:

```
$ defaults write com.apple.desktopservices  
DSDontWriteNetworkStores false
```

Mac Flashback Trojan

You can use `defaults` to determine if your Macintosh has been infected by the Mac Flashback Trojan (which enters your computer through either a Adobe Flash Player flaw or a Java flaw). Also known as `OSX.FlashBack`, Flashback Trojan, Fakeflash, or Trojan BackDoor.Flashback

Type the following command (copy and paste into Terminal):

```
$ defaults read /Applications/Safari.app/Contents/Info  
LSEnvironment
```

A clean system will report “The domain/default pair of (/Applications/Safari.app/Contents/Info, LSEnvironment) does not exist”. Any other result indicates your computer is infected.

If your computer passes the first test, type the following command (copy and paste into Terminal):

```
$ defaults read ~/.MacOSX/environment DYLD_INSERT_LIBRARIES
```

A clean system will report “The domain/default pair of (/Users/*user-name*/.MacOSX/environment, DYLD_INSERT_LIBRARIES) does not exist”. Any other result indicates your computer is infected.

If your computer is infected, immediately go to F-Secure at http://www.f-secure.com/v-descs/trojan-downloader_osx_flashback_i.shtml class="externallink".

Downloading the latest security patches from Apple at http://support.apple.com/kb/HT5228?viewlocale=en_US&locale=en_US will help prevent infection.

init

chapter 62

summary

This chapter looks at `init`, a Linux command.

`init` is used to change the runlevel.

run levels

Linux has run levels (sometimes written as a single word, `runlevel`). The non-graphic mode is run level 3. the graphic mode is run level 5. Sometimes a Linux server will only boot up to the non-graphic level. You can use this command to temporarily get the graphic interface running (run level 5).

```
$ init 5
```

Edit the `/etc/inittab` file to include `id:5:initdefault:` to make a permanent change.

A chart of the Linux run levels:

RUN LEVEL	DESCRIPTION
0	System is halted
1	Single-user Mode used for system maintenance
2	Multiuser mode without networking rarely used
3	Standard multiuser mode with networking active
4	not defined
5	Multiuser mode with graphics

Like standard multiuser mode with networking active plus the X Window System
graphic interface

- 6 Reboots the system
shuts down all system services

sendmail

chapter 63

summary

This chapter looks at `sendmail`, a UNIX/Linux utility.

`sendmail` is used to send email.

In 1975 the `Sendmail` email system was added to the BSD version of UNIX. Because email was built into the operating system, email was the method UNIX used for sending notifications to the system administrator of system status, reports, problems, etc.

set-up

Each version of UNIX has its own variation of `sendmail`, but the default installation almost always works correctly without modification. A system administrator rarely needs to know how to set-up or modify `sendmail`.

ifconfig

chapter 64

summary

This chapter looks at `ifconfig`, a UNIX (and Linux) command.

`ifconfig` is used to view or configure network cards and interfaces.

Warning: `ifconfig` will not save changes on AIX after a reboot. On Linux, any changes made with `ifconfig` are saved on a reboot.

view configuration

Type `ifconfig` by itself to view how your network is configured.

```
$ ifconfig
```

static IP address

Use `ifconfig interface IP-address` to set the static IP address for a particular interface

```
$ ifconfig en0 100.1.1.1
```

other

On November 8, 2010, Ramesh Natarajan named this the number 36 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

arp

chapter 65

summary

This chapter looks at `arp`, a UNIX (and Linux) command.

`arp` is used to display and modify the Internet-to-Ethernet address translation tables.

display all

Use the `-a` option to display all of the current ARP entries. Useful in conjunction with `ifconfig` and `route`.

```
$ arp -a
? (192.168.0.1) at 0:11:95:75:8:86 on en1 [ethernet]
? (192.168.0.106) at 0:d:60:d2:55:3f on en1 [ethernet]
? (192.168.0.255) at ff:ff:ff:ff:ff:ff on en1 [ethernet]
$
```

netstat

chapter 66

summary

This chapter looks at `netstat`, a UNIX (and Linux) command.

`netstat` is used to symbolically displays the contents of various network-related data structures.

view connections

Type `netstat` to see the list of all sockets and server connections.

```
$ netstat
```

main info

The main information for webserver administration is in the first few lines, so you can pipe to `head`:

```
$ netstat | head
```

routing addresses

Use the `-r` option to display the network routing addresses.

```
$ netstat -r
```

route

chapter 67

summary

This chapter looks at `route`, a UNIX (and Linux) command.

`route` is used to manipulate the network routing tables.

view connections

Type `route` followed by the `-v` option to list the routing tables. This is close to the same information reported by `netstat -r`.

```
$ route -v
```

routing commands

The `route` utility can be used for `add`, `flush`, `delete`, `change`, `get`, or `monitor`.

The `add` command will add a route.

The `flush` command will remove all routes.

The `delete` command will delete a specific route.

The `change` command will change aspects of a route (such as its gateway).

The `get` command will lookup and display the route for any destination.

The `monitor` command will continuously report any changes to the routing information base, routing lookup misses, or suspected network partitionings.

ping

chapter 68

summary

This chapter looks at `ping`, a UNIX (and Linux) command.

`ping` is used to test a server connection.

test packets

`ping` sends test packets to a specific server to see if the server responds properly.

Type `ping` followed by `-c count` followed by an IP address or domain name.

`ping` will continue forever unless halted or you give a specific count limit.

```
$ ping -c 5 www.osdata.com
PING osdata.com (67.18.4.2): 56 data bytes
64 bytes from 192.168.0.1: icmp_seq=0 ttl=127 time=18.801 ms
64 bytes from 192.168.0.1: icmp_seq=1 ttl=127 time=9.918 ms
64 bytes from 192.168.0.1: icmp_seq=2 ttl=127 time=17.216 ms
64 bytes from 192.168.0.1: icmp_seq=3 ttl=127 time=6.748 ms
64 bytes from 192.168.0.1: icmp_seq=4 ttl=127 time=30.640 ms

--- 192.168.0.1 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max/stddev = 6.748/16.665/30.640/8.295 ms
$
```

`ping` will quickly either return a report or will say *destination host unreachable* on failure.

measruing

You can measure the dropped packet rate and the minimum, mean, maximum, and standard deviation of round-trip times.

When using `ping` for testing, start by pinging local host to verify that the local network interface is up and running. Then ping hosts and gateways further away.

other

On November 8, 2010, Ramesh Natarajan named this the number 48 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

nslookup

chapter 69

summary

This chapter looks at `nslookup`, a UNIX (and Linux) command.

`nslookup` is used to obtain domain name and IP information about a server.

information

Type `nslookup` followed by a domain name.

```
$ nslookup www.osdata.com
Server:      192.168.0.1
Address:     192.168.0.1#53

Non-authoritative answer:
www.osdata.com canonical name = osdata.com.
Name:   osdata.com
Address: 67.18.4.2

$
```

security

You can use `nslookup` to find the DNS information for a particular host IP in your server access logs.

traceroute

chapter 70

summary

This chapter looks at `traceroute`, a UNIX (and Linux) command.

`traceroute` is used to obtain the entire path to a server or host.

entire route

Type `traceroute` followed by a domain name.

```
$ traceroute www.osdata.com
```

You can use `traceroute` to diagnose network problems. When some people can access your website and other can't, then `traceroute` can help you find the break or error along the network path.

etiquette

`traceroute` puts a load on every server in the path to the selected host. Therefore, only use `traceroute` when you need the diagnosis.

ftp and sftp

chapter 71

summary

This chapter looks at `ftp` and `sftp`, a UNIX (and Linux) command.

`ftp` is File Transfer Protocol.

`sftp` is Secure File Transfer Protocol.

In general, you should use `sftp` rather than `ftp`. There is a lot of overlap between the two tools and their commands. This chapter will primarily discuss examples as `ftp`. In practice you should substitute `sftp` whenever possible.

There are many graphic FTP tools available. You should consider using these tools for most file transfers. I personally use Fetch, but that's from long time habit. FileZilla is popular, free, and open source, with binaries available for Windows, Linux, and Mac OS X, and source code available for most other platforms.

For serious scripting, you should probably consider the more powerful `cURL` (see [next chapter](#)).

You will find many existing scripts that use `ftp`. When you are using the command line, it is often easier and faster to do quick work with `ftp` or `sftp`. If you are at an unfamiliar machine and simply fall back on the command line FTP rather than try to guess what graphic FTP program is available.

Adobe recommends using command line FTP “for testing when troubleshooting problems with the Dreamweaver or UltraDev FTP client.”. See web page http://kb2.adobe.com/cps/164/tn_16418.html. This is a recommendation to the mostly artist, non-geek audience for Adobe's creative products. Adobe provides step by step instructions for both Windows and Mac OS X.

sample session

The following sample session shows how a simple `ftp` session might go. This will give you context for the many specific details that follow.

```
$ ftp example.com
Connected to example.com
220 example FTP Server (Version x.x Mon Jan 20 05:32:40 EDT 2014)
ready.
User (example.com:(none)): User-name
331 Password required for user-name
Password: password
230 User user-name logged in.
ftp> cd /directory
250 CWD command successful.
ftp> pwd
257 "/directory" is the current directory.
ftp> ls
random.txt
picture.png
226 transfer completed
ftp> ascii
200 Type set to A.
ftp> put filename.txt
200 PORT command successful.
Opening ASCII mode data connection for filename.txt
226 Transfer complete
ftp> quit
221 Goodbye.
$
```

formatting for this lesson

In the following examples, things you type will be in **bold**. Anything contained inside square braces [] is optional and anything outside of square braces is required. Braces inside braces indicate options that can be applied to options. The stroke or vertical bar character | indicates a choice — enter only one of the choices. Ellipses ... indicate that you can have one, two, or more of the indicated item.

standard FTP

To start an FTP session, type `ftp hostname`. The host name can be a named URL or an IP address. REMINDER: whenever possible, substitute `sftp` for `ftp` throughout this chapter.

You will be asked for your userid and password.

To end the FTP session type either `quit` or `bye`.

Enter commands after the `ftp>` prompt. to conduct your FTP session. Type `help` to get a current list of commands available and type `help` followed by a command to get help on a specific command.

All FTP commands are case sensitive and in lower case.

anonymous FTP

Some servers allow anonymous ftp access. Use `anonymous` or `ftp` as your userid. If you are asked for a logon password, your own email address or `guest` will often be acceptable.

help

`?` will give a list of available commands. If followed by the name of a specific command, it will give a brief description of that command. Works the same way as `help`.

help will give a list of available commands. If followed by the name of a specific command, it will give a brief description of that command. Works the same way as `?`.

rhelp will get help from the remote server (which may have a different command set than the local machine). `rhelp` is more commonly available than `remotehelp`.

```
ftp> rhelp
```

remotehelp will get help from the remote server (which may have a different command set than the local machine).

```
ftp> remotehelp [command-name]
```

connections

ftp will connect to a remote FTP server. This command is given at the normal command shell to start FTP. Provide a host name (URL or IP address) and an optional port number.

```
$ ftp host-name [port]
```

sftp will connect to a remote FTP server using secure SSH. This command is given at the normal command shell to start SFTP. Provide a host name (URL or IP address) and an optional port number.

```
$ sftp host-name [port]
```

open will connect to a specified remote FTP host (by name or IP address). An optional port number may be supplied. If auto-login option is on (the default), then FTP will attempt to automatically log the user in to the FTP server.

```
ftp> open host-name [port]
```

account will supply a supplemental password. Sometimes there is a need for an additional password to access specific resources (such as a password-protected directory). If no argument is included, the user will be prompted for an account password in a non-echoing input mode.

```
ftp> account [password]
```

close will terminate the FTP session. You can follow a `close` command with a `open` command to connect to a new host. This is the same as the `disconnect` command. Any defined macros are erased.

```
ftp> close
```

disconnect will terminate the FTP session. You can follow a `disconnect` command with a `open` command to connect to a new host. This is the same as the `close` command.

```
ftp> disconnect
```

bye will terminate the FTP session and exit back to the shell. The same as `quit`.

```
ftp> bye
```

quit will terminate the FTP session and exit back to the shell. The same as `bye`.

```
ftp> quit
```

file transfers

ascii will set the FTP session for ASCII file transfers (the alternative is binary). This is the default method.

binary will set the FTP session for binary file transfers (the alternative is `ascii`).

type will set the file transfer type.

form will set the file transfer format. The default format is `file`.

```
ftp> form format
```

mode will set the file transfer mode. The default format is `stream`.

```
ftp> mode mode-name
```

struct will set file transfer structure to `struct-name`. The default is `stream` structure.

```
ftp> struct struct-mode
```

xferbuf will set the size of the socket send/receive buffer.

```
ftp> xferbuf size
```

get will receive a file from the remote server. Name the file after the `get` command. You may optionally follow with a second name which will assign the second file name to the local downloaded file. The same as `recv`.

recv will receive a remote file. Name the file after the `recv` command. You may optionally follow with a second name which will assign the second file name to the local downloaded file. The same as `get`.

mget will get multiple remote files. If `glob` is on, then you can use wildcards in specifying files. Toggle `prompt` off if you don't want to be prompted for each file downloaded.

fget will get files using a localfile as the source of the file names. That is, put the list of file names into a local file and then pass that file name to this command.

```
ftp> fget localfile
```

glob will toggle metacharacter expansion of local file names.

put will send one file to the remote server. Follow the `put` command with the file to upload. Optionally include a second name to assign a different name to the file uploaded to the remote server. It is an error if the file does not exist on your local machine. The same as `send`.

send will send one file to the remote server. Follow the `send` command with the file to upload. Optionally include a second name to assign a different name to the file uploaded to the remote server. It is an error if the file does not exist on your local machine. The same as `put`.

append will append to a file.

```
ftp> append local-file [remote-file]
```

mput will send multiple files to the remote server. If `glob` is on, then you can use wildcards in specifying files. Toggle `prompt` off if you don't want to be prompted for each file uploaded.

delete will delete a remote file.

mdelete will delete multiple remote files.

rename will rename a file on the remote server.

directory control

pwd will print the current working directory on the remote server.

```
ftp> pwd
```

lpwd will print the current *local* working directory.

```
ftp> lpwd
```

cd changes the working directory on the remote server. Use `lcd` to change the local working directory.

ls will list the contents of a remote directory. Works the same as `dir`. The listing will include any system-dependent information the server chooses to include. Most UNIX systems will produce the output of the command `ls -l`. You may name a specific remote directory. Otherwise, the current remote working directory is listed.

You may optionally also name a local file and the listing will be stored in the designated local file. If no local file is specified or the local file is “–”, the output will be sent to the terminal.

```
ftp> ls [remote-path [local-file]]
```

dir will list the contents of the remote directory. Works the same as `ls`.

- `dir -C` lists the files in wide format.
- `dir --l` lists the files in bare format in alphabetic order.
- `dir --S` lists the files in bare format in alphabetic order.
- `dir --r` lists the files in reverse alphabetic order.
- `dir -R` lists all files in the current directory and sub directories.

lcd will display the local working directory if typed by itself. If a path name follows the `lcd` command, it will change the local working directory. Use `cd` to change the remote working directory.

mlst will list the contents of the remote directory in a machine parsable form. It defaults to listing the current remote working directory.

```
ftp> mlst [remote-path]
```

mdir will list the contents of multiple remote directories. Works the same as `mls`.

mls will list the contents of multiple remote directories. Works the same as `mdir`.

mkdir will make a directory on the remote server.

rmdir will delete or remove a directory on the remote server.

```
ftp> rmdir directory-name
```

modtime will show the last modification time and date for a remote file.

```
ftp> modtime remote-file
```

chmod will change file permissions on a remote file.

```
ftp> chmod mode remote-file
```

toggles

cr will toggle the stripping of carriage returns during ASCII type file retrieval. records are denoted by the sequence of carriage return/line feed sequence during ASCII type file transfer. When **cr** is on, carriage returns are stripped to conform to the UNIX single linefeed record delimiter. This is the default. records on non-UNIX remote systems may contain single linefeeds and when an ASCII type file transfer is made, these linefeeds will only be distinguished from a record delimiter if **cr** is off. The default is for **cr** to be on.

```
ftp> cr [ on | off ]
```

debug will toggle the debugging mode. If the optional debug value is provided, it is used to set the debugging level. When debugging is on, FTP prints each command sent to the remote server, preceded by the string “-->”.

```
ftp> debug [ on | off | debuglevel ]
```

gate will toggle the gate-ftp. Specify the optional host[:port] to change the proxy.

```
ftp> gate [ on | off | gateserver [port] ]
```

glob will toggle metacharacter expansion of local file names.

hash will toggle printing # for each buffer of 1,024 (1 kilobyte) of data is transferred.

passive will toggle the use of passive transfer mode.

```
ftp> passive [ on | off | auto ]
```

sunique will toggle storing of files under unique file names on the remote server. Remote FTP server must support the FTP protocol STOU command for successful completion. The remote server will report unique names. The default is off.

```
ftp> sunique [ on | off ]
```

trace will toggle packet tracing.

verbose will toggle the verbose mode. In verbose mode, all responses from the

FTP server are displayed to the local user. When a file transfer completes, verbose mode also provides statistics about the efficiency of the file transfer. By default, verbose is on.

```
ftp> verbose [ on | off ]
```

pagers

Some versions of command line FTP will allow you to read the contents of remote files in a local pager (such as less or more).

page will view a remote file through your local pager.

```
ftp> page remote-file
```

less will view a remote file through the pager named `less`.

```
ftp> less remote-file
```

more will view a remote file through the pager named `more`.

```
ftp> more remote-file
```

pdir will list the contents of a remote path through your local pager. You can designate a specific remote path or default to the remote server current working directory.

```
ftp> pdir [remote-path]
```

lpage will view a local file through your local pager.

```
ftp> lpage local-file
```

other commands

prompt will force interactive prompting on multiple commands.

system will show the operating system running on the remote server.

```
ftp> system
```

status will show the current status.

rstatus will show the current status of the remote server. If a file name is specified, it will show the status of the file on the remote server.

```
ftp> rstatus [remote-file]
```

remotestatus will show the current status of the remote server. If a file name is specified, it will show the status of the file on the remote server.

```
ftp> remotestatus [remote-file]
```

user will send new user information.

! Escape the the shell. Type `exit` to return to the FTP session. You can follow **!** with a specific command. If you type a command, then all the following text will be considered as arguments for that command.

```
ftp> ! [command [args]]
```

```
ftp> !
$ unix_command
command results
$ exit
ftp>
```

bell will beep when a command is completed.

literal will send an arbitrary FTP command with an expected one line reponse. The same as `quote`.

macro will execute the designated macro `macro-name`. The macro `macro-name` must have been defined with the `macdef` command. Arguments passed to the macro are unglobbed.

```
ftp> $ macro_name [args]
```

quote will send an arbitrary command to the remote server. The same as

`literal`. All arguments are sent verbatim to the remote FTP server.

```
ftp> quote line-to-send [ arg1 arg2 ... ]
```

FileZilla

FileZilla Client is a free, open source FTP client that supports FTP, SFTP, and FTPS (FTP over SSL/TLS). It is available for many operating systems and there are binaries available for Windows, Linux, and Mac OS X. The source code is hosted at <http://sourceforge.net/projects/filezilla>. The binaries can be found at <https://filezilla-project.org/download.php>.

While FileZilla is intended as a graphic interface for FTP, the client will accept command line.

Use the command `filezilla [<FTP URL>]` to connect to a server. The form of the URL should be `[protocol://][user[:pass]@]host[:port][/path]`. Valid protocols include **ftp://**, **ftps://**, **ftpes://**, or **sftp://**. The default is ordinary ftp.

Use the option `-c` or `--site=<string>` to connect to the specified Site Manager site.

Use the option `-a` or `--local=<string>` to set the local directory from which you will be uploading files.

Putting this together, the following example will connect to the site `example.com` by ftp protocol using the user name and password and sets the local folder (directory) to uploads in the current user's home directory:

```
$ filezilla ftp://username:password@ftp.example.com --  
local=~/.uploads"
```

Use the `-l` or `---logontype=(askinteractive)` flag to have FileZilla interactively ask for login information. This option is useful for scripting.

other

On November 8, 2010, Ramesh Natarajan named this the number 19 most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

cURL

chapter 72

summary

This chapter looks at `cURL`, a UNIX (and Linux) command line tool.

`curl` is used to interact with the internet.

`cURL` is a command line tool and accompanying library for transferring data over the internet. `cURL` supports a wide variety of internet protocols, including DICT, FILE, FTP, FTPS, Gopher, HTTP, HTTPS, IMAP, IMAPS, LDAP, LDAPS, POP3, POP3S, RTMP, RTSP, SCP, SFTP, SMTP, SMTPS, Telnet, and TFTP.

download a file

You can use `curl` to download the content of a URL. The following command displays the HTML for Google as the STDOUT (on your Terminal screen):

```
$ curl http://www.google.com
```

redirect a download

You can redirect the results to file using the standard UNIX/Linux redirect. You will be given some status information if you redirect.

```
$ curl http://www.google.com > google.html
  % Total    % Received % Xferd  Average
Speed  Time      Time      Time    Current
           Dload  Upload  Total  Spent    Left  Speed
   100 10559    0 10559    0      0 26690      0  --:--:-- --:--:-- --:--:--
- 323k
```

You can use the `-o` (lower case) to save the downloaded file with the name of your choice. You will see progress meter information as the download progresses. In the

example, the download was so fast that only one status report was created.

```
$ curl -o google.303 www.google.com
% Total    % Received % Xferd  Average
Speed    Time      Time      Time   Current
           Dload  Upload  Total  Spent    Left  Speed
  100    219    100    219     0      0   800      0 --:--:-- --:--:-- --:--:--
- 0
```

sysstat

chapter 73

summary

This chapter looks at `sysstat`, a server package.

package

`sysstat` is a server toolset originally created by Sebastien Godard.

Download `sysstat` from <http://pagesperso-orange.fr/sebastien.godard/download.html>.

The most famous tools are `iostat`, `pidstat`, and `sar`.

`iostat` reports CPU statistics and input/output statistics for devices, partitions and network filesystems.

`mpstat` reports individual or combined processor related statistics.

`pidstat` reports statistics for Linux tasks (processes) : I/O, CPU, memory, etc.

`sar` collects, reports and saves system activity information (CPU, memory, disks, interrupts, network interfaces, TTY, kernel tables, etc.)

`sadc` is the system activity data collector, used as a backend for `sar`.

`sa1` collects and stores binary data in the system activity daily data file. It is a front end to `sadc` designed to be run from `cron`.

`sa2` writes a summarized daily activity report. It is a front end to `sar` designed to be run from `cron`.

`sadf` displays data collected by `sar` in multiple formats (CSV, XML, etc.) This is useful to load performance data into a database, or import them in a spreadsheet to make graphs.

`nfsiostat` reports input/output statistics for network filesystems (NFS).

`cifsioat` reports CIFS statistics.

at

chapter 74

summary

This chapter looks at `at`, a UNIX (and Linux) command.

`at` is used to schedule a particular job at a particular time.

example

Type `at midnight`, followed by ENTER or RETURN.

```
$ at midnight
```

You may see the `at>` prompt (on Mac OS X, there is no prompt).

Type a single command, followed by ENTER or RETURN.

```
$ who > who.out
```

Type one command per line.

When finished, hold down the CONTROL key and then the D key (written `^d`) to exit `at`.

```
job 1 at Fri Jul 13 00:00:00 2012
$
```

You will see a job number and the time it will run. This job will run all of the commands you entered.

removing an at job

Type `atrm` (for at remove), followed by the job number to remove an existing at job.

```
$ atrm 1
```

timing

You can name a specific time using the YYMMDDhhmm.SS format.

You can also specify noon, midnight, or teatime (4 p.m.).

If the time has already passed, the next day is assumed.

back ups

chapter 75

summary

This chapter looks at backing up systems and data.

While everyone should perform back ups, when a system crashes, everyone will turn to the system administrator to be rescued. And this is a get yourself fired kind of issue because the system administrator will always get the blame for lack of back ups.

tools

Your basic tools for back ups are `tar`, various compression schemes, and `cron` scripts.

`tar` stands for Tape ARchive, from back in the days when back ups were put on those large tape machines you see in the old James Bond movies.

`cron` is a system for scheduling jobs, including UNIX shell scripts, to run at specific times.

rule of thumb

People are always asking how often they should do their backups, looking for a regular time period.

The rule of thumb on back-ups is to back up your data before you reach the point where you have too much work to do to replace the data.

If you start typing an email and the system crashes, you are annoyed, but you can type the email over again. On the other hand, if you lose all of your emails, you have a problem.

Hence, the simple rule of thumb to back up as soon as you are about to have too much data to create over again.

Notice that this answer wasn't in the form of a specific time period (such as daily or weekly).

The reality of any large scale system is that you will be using the cruder method of specific times, such as daily, weekly, and monthly back ups.

incremental and full

A full back up stores everything on a system.

An incremental backup stores only those things that have changed.

Back ups (especially full backups) take a lot of storage space.

The typical policy is to do incremental backups fairly often (daily, hourly, whatever is appropriate for the demands of your system) and to do full backups less often (weekly or even monthly).

When you have a failure, you go back to the last full back up and then run every incremental back up. The more incremental back ups you have to run, the longer it will be before the sytem is restored, with angry users and angry bosses waiting impatiently.

three location storage

There is the rule of a minimum of three copies of your back ups. You have two copies of your back on site and one stored at a secure location far away.

The secure storage copy protects you from fires or eathquakes or floods or other disasters that physically destroy your ability to restore your system. Therefore, the secure back ups need to be kept far enough away that they won't get destroyed in the same disaster.

Of course, this also means that there is travel time for using the secure back up.

The local back ups are usually alternated (or rotated, if you have more than just two).

The first full back up is stored on media A. The next full back up is stored on media B. The next full back up is stored on media A (wiping out the original back up).

tar

chapter 76

summary

This chapter looks at `tar`, a UNIX (and Linux) command.

Use `tar` for making backups and for retrieving open source software from the internet.

`tar` files are often used to distribute open source programs.

`tar` is short for Tape ARchive.

Warning: `tar` does *not* work the exact same on all versions of UNIX and Linux. Test and confirm local variations before relying on scripts moved from one platform to another.

create

Creating a new tar archive:

```
$ tar cvf archivename.tar dirname/
```

The `c` indicates create a new archive, the `v` indicates verbosely list file names, and the `f` indicates that the following is the archive file name. The `v` option may be left out to avoid a long list.

Creating a new gzipped tar archive:

```
$ tar cvzf archivename.tar.gz dirname/  
$ tar cvzf archivename.tgz dirname/
```

The `z` indicates the use of gzip compression. The file extensions `.tgz` and `.tar.gz`

mean the same thing and are interchangeable.

Creating a new bzip2 tar archive:

```
$ tar cvzj archivename.tar.bz2 dirname/  
$ tar cvzj archivename.tbz dirname/
```

The `j` indicates the use of bzip2 compression. The file extensions `.tbz` and `.tar.bz2` mean the same thing and are interchangeable.

Bzip2 takes longer to compress and decompress than gzip, but also produces a smaller compressed file.

extract

Extracting from an existing tar archive:

```
$ tar xvf archivename.tar
```

The `x` indicates extract files from an archive, the `v` indicates verbosely list file names, and the `f` indicates that the following is the archive file name. The `v` option may be left out to avoid a long list.

Extracting from a gzipped tar archive:

```
$ tar xvfz archivename.tgz  
$ tar xvfz archivename.tar.gz
```

The `z` option indicates uncompress a gzip tar archive.

Extracting from a bzipped tar archive:

```
$ tar xvfj archivename.tbz  
$ tar xvfj archivename.tar.bz2
```

The `j` option indicates uncompress a bzip2 tar archive.

tarpipe

It is possible to tar a set of directories (and their files and then pipe the tar to an extraction at a new location, making an exact copy of an entire set of directories (including special files) in a new location:

```
$ tar -c "$srcdir" | tar -C "$destdir" -xv
```

tarbomb

A malicious tar archive could overwrite existing files. The use of absolute paths can spread files anywhere, including overwriting existing files (even system files) anywhere. The use of parent directory references can also be used to overwrite existing files.

One can examine the tar archive without actually extracting from it.

The bsdtar program (the default tar on Mac OS X v10.6 or later) refuses to follow either absolute path or parent-directory references.

viewing

Viewing an existing tar archive (without extracting) with any of the following:

```
$ tar tvf archivename.tar
$ tar -tf archivename.tar
$ tar tf archivename.tar
$ tar --list --file=archivename.tar
```

Viewing an existing gzipped tar archive (without extracting) with any of the following:

```
$ tar tvfz archivename.tar.gz
$ tar tvfz archivename.tgz
```

Viewing an existing bzipped tar archive (without extracting) with any of the following:

```
$ tar tvfj archivename.tar.bz2
$ tar tvfj archivename.tbz
```

less

You can pipe the output of a tar file to the less command.

You can directly use the less command to open a tar archive. Less will show you the names of the files, the file sizes, the file permissions, the owner, and the group (the

equivalent of `ls -l`).

```
$ less archivename.tar
```

extracting a single file

You can extract a specific single file from a large tar archive.

```
$ tar xvf archivefile.tar /complete/path/to/file
```

You can extract a specific compressed file from a large tar archive.

```
$ tar xvf archivefile.tar.gz /complete/path/to/file  
$ tar xvf archivefile.tar.bz2 /complete/path/to/file
```

extracting a single directory

You can extract a specific single directory from a large tar archive.

```
$ tar xvf archivefile.tar /complete/path/to/dir/
```

You can extract a specific compressed directory from a large tar archive.

```
$ tar xvf archivefile.tar.gz /complete/path/to/dir/  
$ tar xvf archivefile.tar.bz2 /complete/path/to/dir/
```

extracting a few directories

You can extract specific directories from a large tar archive by giving the name of each of the directories.

```
$ tar xvf archivefile.tar /complete/path/to/dir1/  
/complete/path/to/dir2/
```

You can extract specific compressed directories from a large tar archive.

```
$ tar xvf archivefile.tar.gz /complete/path/to/dir1/  
/complete/path/to/dir2/  
$ tar xvf archivefile.tar.bz2 /complete/path/to/dir1/
```

```
/complete/path/to/dir2/
```

extracting a group of files

You can extract a group of files from a large tar archive by using globbing. Specify a pattern (the following example finds all .php files):

```
$ tar xvf archivefile.tar --wildcards '*.php'
```

You may use the gzip and bzip2 options as well.

adding to an existing archive

You can add an additional file to an existing tar archive with the option `-r`:

```
$ tar rvf archivefile.tar newfile
```

You can add an additional directory to an existing tar archive:

```
$ tar rvf archivefile.tar newdir/
```

This does *not* work for adding a file or directory to a compressed archive. You will get the following error message instead:

```
tar: Cannot update compressed archives
```

verifying files

You can verify a new archive file while creating is by using the `-W` option:

```
$ tar cvfW archivefile.tar dir/
```

If you see something similar to the following output, something has changed:

```
Verify 1/filename
1/filename: Mod time differs
1/filename: Size differs
```

If you just see the Verify line by itself, the file or directory is fine:

```
Verify 1/filename
```

The `-W` option does *not* work for compressed files.

For gzip compressed files, find the difference between the gzip archive and the file system:

```
$ tar dfz 1/filename.tgz
```

For bzip2 compressed files, find the difference between the bzip2 archive and the file system:

```
$ tar dfj 1/filename.tbz
```

other

On November 8, 2010, Ramesh Natarajan named this the number one (1) most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

touch

chapter 77

This chapter looks at `touch`, a Unix (and Linux) command.

Use `touch` to change the date stamp on a file.

The most common use of `touch` is to force make to recompile a particular file (or group of files).

how to use

The simple form of `touch` changes a named file's timestamp to the current date and time:

```
$ touch filename
```

multiple files

Use `touch` to change all of the files in a directory:

```
$ touch *
```

specific time

You can use `touch` to set a specific time by using the `-t` option. The following command sets a file to the Solstice at the end of the Mayan calendar (11:12 a.m. December 21, 2012):

```
$ touch -t201212211112.00 filename
```

The following command sets a file to the noon on January 1, 2012:

```
$ touch -t201201011200.00 filename
```

The format is `YYYYMMDDhhmm.ss`, `YYYY` = four digit year, `MM` - two digit month, `DD` = two digit day, `hh` = two digit hour (24 hour clock), `mm` = two digit month, and `ss` = two digit second.

create an empty file

You can use `touch` to create an empty file. Simply issue the `touch` command with the desired file name.

```
$ touch filename
```

This will create an empty file with the designated file name.

Why would you want to do this? One common reason is to create an expected file. Some scripts will check for the existence of particular files and choke if they can't find them. If the script does not need particular data already stored in the file (for example, it will be appending data into the file or it is simply checking for the existence of the file), then `touch` is your fast and easy method for creating the expected file (as an empty file).

find

chapter 78

summary

This chapter looks at `find`, a UNIX (and Linux) command.

`find` is used to find files.

find a file

&You can use `find` to quickly find a specific file. The `-x` option (this is `-xdev` on older systems) limits the search to only those directories on the existing filesystem.

```
$ find / -name filename -type d -x
```

Note that you may want to run this command from root or superuser.

The `locate` command is more recent.

gotchas

Do not use the output of `find` in a BASH `for` loop.

```
$ for i in $(find *.mp3); do # Wrong!  
$     command $i # Wrong!  
$ done # Wrong!  
  
$ for i in $(find *.mp3) # Wrong!  
$ for i in `find *.mp3` # Wrong!
```

If any file name has spaces in it, then it will be word split. So, the MP3 for Mumford & Sons's "The Cave" (number two song on their "Sigh No More" album) might be 02 The Cave. In that case, your command would run on the files "02", "The", and "Cave", rather than "02 The Cave". Additional errors likely to follow.

Listen to the song “[The Cave](#)” for free.

Double quote won't work either because that will cause the entire output of the `find` command to be treated as a single item. Your loop will run once on all of the file names concatenated together.

```
$ for i in "$(ls *.mp3)"; # Wrong!
```

The solution is to run your loop without even using `find`, relying on BASH's filename expansion. Don't forget to check for the possibility that there are no qualifying files in the current directory.

```
$ for i in *.mp3; do # Wrong!  
$   [[ -f "$i" ]] || continue  
$   command "$i"  
$ done
```

other

On November 8, 2010, Ramesh Natarajan named this the number three (3) most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

text processing

This chapter looks at text processing in Linux/UNIX.

The original approach of UNIX was to move data between small programs as character-based text. Most UNIX commands and tools produce text output as a character stream.

A number of special utilities were developed that allowed a UNIX script to modify the text-based character stream as it passed between programs. That use is still common used in shell scripts.

Some of these tools are also useful for processing and formatting text for humans to read.

text processing tools

There are several text processing tools discussed in this nerdary.

awk
basename
cat
sed
tail
wc

basename

chapter 80

summary

This chapter looks at `basename` in Linux/UNIX.

The `basename` command removes the directory and (optionally) file extension (or suffix) from a file name.

removing directory

Remove the directory portion of a filename with this command:

```
$ basename filename
```

Don't forget to use some form of escaping as needed.

```
$ basename "/home/local/bigfile.txt"  
bigfile.txt  
$
```

removing file suffix

Remove the file suffix portion of a filename with this command:

```
$ basename filename suffix
```

And an example:

```
$ basename "/home/local/bigfile.txt" ".txt"  
bigfile  
$
```

Note that the suffix portion can be *any* text. This means you can use this command to remove the last portion of any text:

```
$ basename "Los Angeles, CA" ", CA"  
Los Angeles  
$
```

sed

chapter 81

summary

This chapter looks at `sed`, a Unix (and Linux) command.

`sed` is a command line editor.

fixing end of line

Windows and DOS end every line with the old carriage return and line feed combination (`\r\n`). You can use `sed` to convert Windows/DOS file format to UNIX file format:

```
$ sed 's/.$//' filename
```

adding line numbers

You can use `sed` to add line numbers to all of the non-empty lines in a file:

```
$ sed '/./=' filename | sed 'N; s/\n/ /'
```

other

On November 8, 2010, Ramesh Natarajan named this the number five (5) most frequently used Unix/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

“sed is for modifying the contents of files using editing commands, including regular expressions. The GNU Sed has many more capabilities than the traditional or POSIX versions of Sed.#148; —Jonathan Leffler

“sed is the stream editor, inspired by ed the editor. It has a simple command set mostly limited to line-by-line editing. sed commands can easily be imitated in awk.” —ephemient

awk

chapter 82

summary

This chapter looks at `awk`, a UNIX (and Linux) command.

`awk` is a programming language intended to serve a place between simple shell scripts and full programming languages. It is Turing complete.

remove duplicate lines

You can use `awk` to remove duplicate lines from a file.

```
$ awk '!($0 in array) { array[$0]; print }' filename
```

other

On November 8, 2010, Ramesh Natarajan named this the number six (6) most frequently used UNIX/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

“`awk` is a pattern matching and formatting language. It is a programming language. When needed, it is very useful. However, Perl and Python also have the capabilities of Awk and many extras, so many people use them instead of Awk. GNU Awk has some more capabilities than the traditional or POSIX versions of Awk.” —Jonathan Leffler

“AWK is a programming language designed by Aho, Weinberger, and Kernighan. `gawk` is one implementation of AWK, but there are several others, including `mawk`, and `nawk`. It is a full-blown programming language with variables, control structures, and associative arrays, but generally optimized for dealing with the sorts of text-based data commonly found on UNIX systems.” —ephemient

screencapture

chapter 83

summary

This chapter looks at `screencapture`, a Mac OS X-only command.

`screencapture` creates an image of the screen or a portion of the screen.

from the graphic user interface

The normal method for obtaining a screen capture is through the graphic user interface. Command-Shift-3 takes a screenshot of the screen and saves it as a file to the desktop under the name of “Picture 1” (or next available number if there are already screenshots saved there).

If you have multiple monitors connected, each monitor is saved as a separate picture, named “Picture 1”, “Picture 1(2)”, “Picture 1(3)”, etc.

With Mac OS X 10.6 (Snow Leopard) the default name changes to “Screen shot YYYY-MM-DD at HH.MM.SS XM”, where YYYY=year, MM=month, DD=day, HH=hour, MM=minute, SS=second, and XM = either AM or PM.

The basic screen capture options:

- **Command-Shift-3:** Take a screenshot of the entire screen and save it as a file on the desktop.
- **Command-Shift-4, then select an area:** Take a screenshot of an area and save it as a file on the desktop.
- **Command-Shift-4, then space, then click on a window:** Take a screenshot of a selected window and save it as a file on the desktop.
- **Command-Control-Shift-3:** Take a screenshot of the screen and save it to the clipboard.
- **Command-Control-Shift-4, then select an area:** Take a screenshot of an area and save it to the clipboard.
- **Command-Control-Shift-4, then space, then click on a window:** Take a

screenshot of a selected window and save it to the clipboard.

In Mac OS X 5 (Leopard) or more recent, the following keys can be held down when selecting an area (with either Command-Shift-4 or Command-Control-Shift-4):

- **Space:** Used to lock the size of the selected region and move the selected region as the mouse moves.
- **Shift:** Used to resize only one edge of the selected region.
- **Option:** Used to resize the selected region with its center as the anchor point.

Different versions of Mac OS X have different default file formats for saving the screenshot:

- **Mac OS X 10.2 (Jaguar):** jpg
- **Mac OS X 10.3 (Panther):** pdf
- **Mac OS X 10.4 (Tiger):** png

changing defaults

The following methods use Terminal to change the default file format and location where the screenshot is saved from the graphic user interface.

In Mac OS X 10.4 (Tiger) or more recent, the default screencapture format can be changed in Terminal by using the `defaults` command. In Mac OS X 10.4 (Tiger), the new default does not take effect until you logout and log back in (from the entire computer, not just from Terminal — a full restart will also work) unless you also use the `killall` command.

```
$ defaults write com.apple.screencapture type ImageFormat
$ killall SystemUIServer
```

The *ImageFormat* can be png (Portable Network Graphic), pdf (Portable Document Format), tiff (Tagged Image File Format), jpg or jpeg (Joint Photographic Experts Group), pict (Macintosh QuickDraw Picture), bmp (Microsoft Windows Bitmap), gif (Graphics Interchange Format), psd (Adobe Photoshop Document), sgi (Silicon Graphics File Format), or tga (Truevision Targa File Format).

JPGs are saved at quality 60%.

To change the default location where the screenshot file is saved (the default is Desktop), use the following Terminal command (where *PathName* is the full path to a directory).

```
$ defaults write com.apple.screencapture location PathName
```



```
$ killall SystemUIServer
```

The normal default location would be reset with the following command (where *UserName* is the current account's user name).

```
$ defaults write com.apple.screencapture location  
/Users/UserName/Desktop  
$ killall SystemUIServer
```

command line screenshots

You can also take screenshots from Terminal.

I needed a screenshot of the CONTROL-TAB selection of a program, but in the graphic user interface, I couldn't simultaneously run Command-Tab and Command-Shift-4, so I used the following command in Terminal to set a 10 second delay and save the screenshot selection:

```
$ screencapture -T 10 -t png controltab.png
```



You can add this command to your Mac OS X scripts.

The format is `screencapture options filenames`. List more than one file name if you have more than one monitor. You can use the options in any combination.

You can use the *filename* to change the file name from the normal default and to set a relative path to a directory/folder of your choice.

```
$ screencapture [-icMPmwsWxSCUt] [files]
```

The basic use, which takes an immediate screenshot in the default format and stores it with the designated filename (in this case “Picture1”) in the user’s home directory (not the desktop).

```
$ screencapture Picture1
```

Force the screenshot to go to the clipboard (the equivalent of the Command-Shift-Control- choices).

```
$ screencapture -c [files]
```

Capture the cursor as well as the screen. This applies only in non-interactive modes (such as a script).

```
$ screencapture -C [files]
```

Display errors to the user graphically.

```
$ screencapture -d [files]
```

Capture the screenshot interactively by either selection or window (the equivalent of Command-Shift-4). Use the CONTROL key to cause the screenshot to go to the clipboard. Use the SPACE key to toggle between mouse selection and window selection modes. Use the ESCAPE key to cancel the interactive screen shot.

```
$ screencapture -i [file]
```

Use the `-m` option to only capture the main monitor. This does not work if the `-i` option is also set.

```
$ screencapture -m [file]
```

Send the screenshot to a new Mail message.

```
$ screencapture -M [files]
```

Use the `-o` option in window capture mode to only capture the window and to *not* capture the shadow of the window.

```
$ screencapture -o [file]
```

After saving the screenshot, open the screen capture output in Preview.

```
$ screencapture -P [files]
```

Use `-s` to only allow mouse selection mode.

```
$ screencapture -s [files]
```

Use `-w` to only allow window selection mode.

```
$ screencapture -w [file]
```

Use `-W` to start interaction in the window selection mode.

```
$ screencapture -W [file]
```

Use the `-S` option in window capture mode to capture the screen rather than the window.

```
$ screencapture -S [files]
```

Set the format with the `-t` option. The *Format* can be png (Portable Network Graphic), pdf (Portable Document Format), tiff (Tagged Image File Format), jpg or jpeg (Joint Photographic Experts Group), pict (Macintosh QuickDraw Picture), bmp (Microsoft Windows Bitmap), gif (Graphics Interchange Format), psd (Adobe Photoshop Document), sgi (Silicon Graphics File Format), or tga (Truevision Targe File Format)

```
$ screencapture -tFormat [files]
```

Set a delay time in seconds. The default is five seconds.

```
$ screencapture -TSeconds [files]
```

Prevent the playing of sounds (no camera click sound).

```
$ screencapture -x [files]
```

signals

chapter 84

summary

This chapter looks at UNIX and Linux signals.

The first chart shows the signals by name, with their explanation and their numbers by operating system. The second chart shows the signals by number, with the corresponding name by operating system.

signals chart by name

name	meaning	Linux	Mac OS X	Solaris
SIGABRT	Used by abort		6 create core image	6
SIGALRM	Alarm clock, real-time timer expired (POSIX)	14	14 terminate process	14
SIGBUS	BUS error (BSD 4.2)	7	10 create core image	10
SIGCANCEL	Thread cancellation signal used by libthread			36

SIGCHLD	Child process has stopped or exited, Child status change alias (POSIX)	17	20 discard signal	18
SIGCONT	Continue executing, if stopped; Stopped process has been continued (POSIX)	18	19 discard signal	25
SIGEMT	EMT instruction; Emulate instruction executed		7 create core image	7
SIGFPE	Floating point exception (ANSI)	8	8 create core image	8
SIGFREEZE	Special signal used by CPR			34
SIGHUP	Hangup (POSIX)	1	1 terminate process	1
SIGILL	Illegal instruction (ANSI)	4	4 create core image	4
SIGINFO	status request from keyboard		29 terminate process	
SIGINT	Terminal interrupt (ANSI)	2	2 terminate process	2
SIGIO	I/O now possible (BSD)	29	23	22

	4.2)		discard signal	
SIGIOT	IOT Trap (BSD 4.2)	6	6 create core image now called SIGABRT	
SIGKILL	Kill (POSIX) (can't be caught or ignored)	9	9 terminate process	9
SIGLOST	Resource lost			37
SIGLWP	Special signal used by thread library			33
SIGPIPE	Write on a pipe with no reader, Broken pipe (POSIX)	13	13 terminate process	13
SIGPOLL	Pollable event occurred or Socket I/O possible			22
SIGPROF	Profiling alarm clock, profiling timer expired (BSD 4.2)	27	27 terminate process	29
SIGPWR	Power failure restart (System V)	30		19
SIGQUIT	Terminal quit (POSIX)	3	3 create core image	3
SIGRTMAX	Lowest priority real-time signal			45

SIGRTMIN	Highest priority real-time signal			38
SIGSEGV	Invalid memory segment access, Segmentation violation (ANSI)	11	11 create core image	11
SIGSTKFLT	Stack fault	16		
SIGSTOP	Stop executing (POSIX) (can't be caught or ignored)	19	17 stop process	23
SIGSYS	Bad argument to system call; Non-existent system call invoked		12 create core image	12
SIGTERM	Software termination (ANSI)	15	15 terminate process	15
SIGTHAW	Special signal used by CPR			35
SIGTRAP	Trace trap (POSIX)	5	5 create core image	5
SIGTSTP	Terminal stop signal, User stop requested from TTY (POSIX)	20	18 stop process	24
SIGTTIN	Background process trying to read from TTY control terminal (POSIX)	21	21 stop process	26
SIGTTOU	background process trying to write to TTY control	22	22 stop	27

	terminal (POSIX)		process	
SIGURG	Urgent condition on socket (BSD 4.2)	23	16 discard signal	21
SIGUSR1	User defined signal 1 (POSIX)	10	30 terminate process	16
SIGUSR2	User defined signal 2 (POSIX)	12	31 terminate process	17
SIGVTALRM	Virtual alarm clock, Virtual timer expired (BSD 4.2)	26	26 terminate process	28
SIGWAITING	Process' LWPs are blocked			32
SIGWINCH	Window size change (BSD 4.3, Sun)	28	28 discard signal	20
SIGXCPU	CPU limit exceeded (BSD 4.2)	24	24 terminate process	30
SIGXFSZ	File size limit exceeded (BSD 4.2)	25	25 terminate process	31

signals chart by number

number	Linux	Mac OS X	Solaris
1	SIGHUP	SIGHUP	SIGHUP
2	SIGINT	SIGINT	SIGINT
3	SIGQUIT	SIGQUIT	SIGQUIT
4	SIGILL	SIGILL	SIGILL
5	SIGTRAP	SIGTRAP	SIGTRAP
6	SIGIOT	SIGABRT	SIGABRT
7	SIGBUS	SIGEMT	SIGEMT
8	SIGFPE	SIGFPE	SIGFPE
9	SIGKILL	SIGKILL	SIGKILL
10	SIGUSR1	SIGBUS	SIGBUS
11	SIGSEGV	SIGSEGV	SIGSEGV
12	SIGUSR2	SIGSYS	SIGSYS
13	SIGPIPE	SIGPIPE	SIGPIPE
14	SIGALRM	SIGALRM	SIGALRM
15	SIGTERM	SIGTERM	SIGTERM
16	SIGSTKFLT	SIGURG	SIGUSR1
17	SIGCHLD	SIGSTOP	SIGUSR2
18	SIGCONT	SIGTSTP	SIGCHLD
19	SIGSTOP	SIGCONT	SIGPWR
20	SIGTSTP	SIGCHLD	SIGWINCH
21	SIGTTIN	SIGTTIN	SIGURG
22	SIGTTOU	SIGTTOU	SIGIO SIGPOLL
23	SIGURG	SIGIO	SIGSTOP
24	SIGXCPU	SIGXCPU	SIGTSTP

25	SIGXFSZ	SIGXFSZ	SIGCONT
26	SIGVTALRM	SIGVTALRM	SIGTTIN
27	SIGPROF	SIGPROF	SIGTTOU
28	SIGWINCH	SIGWINCH	SIGVTALRM
29	SIGIO	SIGINFO	SIGPROF
30	SIGPWR	SIGUSR1	SIGXCPU
31		SIGUSR2	SIGXFSZ
32			SIGWAITING
33			SIGLWP
34			SIGFREEZE
35			SIGTHAW
36			SIGCANCEL
37			SIGLOST
38			SIGRTMIN
45			SIGRTMAX

kernel modules

chapter 85

summary

This chapter looks at UNIX and Linux kernel modules.

Loadable Kernel Modules (LKM) go by many different names, including kernel loadable module (kld) in FreeBSD and kernel extension (kext) in Mac OS X, as well as Kernel Loadable Modules (KLM) or Kernel Modules (KMOD).

purpose

Loadable kernel modules allow the flexibility to add additional functionality to an operating system without requiring recompiling and reloading the entire operating system. This same flexibility can be used to choose between various options at start-up time.

Linux

Loadable Kernel Modules (LKMs) are loaded (and unloaded) by the `modprobe` command. Linux LKMs are located in `/lib/modules` and have the file extension `.ko` (for kernel object). Prior to Linux version 2.6 they were identified by the `.o` file extension.

Linux views LKMs as derived works of the kernel and allow symbols to be marked as only available to GNU General Public License (GPL) modules. Loading a proprietary or non-GPL-compatible LKM will set a “taint” flag in the running module.

LKMs run as part of the kernel, so they can corrupt kernel data structures and produce bugs.

FreeBSD

Kernel modules for FreeBSD are stored within `/boot/kernel/` for modules

distributed with the OS, or usually `/boot/modules/` for modules installed from FreeBSD ports or FreeBSD packages, or for proprietary or otherwise binary-only modules. FreeBSD kernel modules usually have the extension `.ko`. Once the machine has booted, they may be loaded with the `kldload` command, unloaded with `kldunload`, and listed with `kldstat`. Modules can also be loaded from the loader before the kernel starts, either automatically (through `/boot/loader.conf`) or by hand.

Mac OS X

Some loadable kernel modules in OS X can be loaded automatically. Loadable kernel modules can also be loaded by the `kextload` command. They can be listed by the `kextstat` command. Loadable kernel modules are located in application bundles with the extension `.kext`. Modules supplied with the operating system are stored in the `/System/Library/Extensions` directory; modules supplied by third parties are in various other directories.

binary compatibility

Linux does not provide a stable API or ABI for kernel modules. This means that there are differences in internal structure and function between different kernel versions, which can cause compatibility problems. In an attempt to combat those problems, symbol versioning data is placed within the `.modinfo` section of loadable ELF modules. This versioning information can be compared with that of the running kernel before loading a module; if the versions are incompatible, the module will not be loaded.

Other operating systems, such as Solaris, FreeBSD, Mac OS X, and Windows keep the kernel API and ABI relatively stable, thus avoiding this problem. For example, FreeBSD kernel modules compiled against kernel version 6.0 will work without recompilation on any other FreeBSD 6.x version, e.g. 6.4. However, they are not compatible with other major versions and must be recompiled for use with FreeBSD 7.x, as API and ABI compatibility is maintained only within a branch.

security

While loadable kernel modules are a convenient method of modifying the running kernel, this can be abused by attackers on a compromised system to prevent detection of their processes or files, allowing them to maintain control over the system. Many rootkits make use of LKMs in this way. Note that on most operating systems modules do not help privilege elevation in any way, as elevated privilege is required to load a LKM; they merely make it easier for the attacker to hide the break-in.

Linux allows disabling module loading via `/proc/sys/kernel/modules_disabled`. A `initramfs` system may load

specific modules needed for a machine at boot and then disable module loading. This makes the security very similar to a monolithic kernel. If an attacker can change the `initramfs`, they can change the kernel binary.

On Mac OS X, a loadable kernel module in a kernel extension bundle can be loaded by non-root users if the `OSBundleAllowUserLoad` property is set to `True` in the bundle's property list. However, if any of the files in the bundle, including the executable code file, are not owned by root and group wheel, or are writable by the group or "other", the attempt to load the kernel loadable module will fail.

LAMP

chapter 86

summary

This chapter looks at LAMP, which is the combination of Linux-Apache-MySQL-PHP (or Perl or Python).

These are all open source programs that provide the ability to have a working modern production web server.

MAMP

The MAMP project achieves the same capabilities using Mac OS X instead of Linux. The MAMP package can be downloaded and used for free without interfering with any similar built-in Mac OS X services. MAMP is intended for creating a local duplicate of your production server environment so that you can freely test new software before deploying it to your production servers.

MAMP can be found at <http://www.mamp.info/en/index.html>.

WAMP

The WampServer project achieves the same capabilities using Windows instead of Linux. The WampServer package can be downloaded and used for free without interfering with any similar built-in Windows services. WampServer is intended for creating a local duplicate of your production server environment so that you can freely test new software before deploying it to your production servers.

WampServer can be found at <http://www.wampserver.com/en/>.

mysql

chapter 87

summary

This chapter looks at MySQL, a Unix (and Linux) command.

`mysql` is the most common SQL database on Linux.

You will probably want to learn the universal SQL commands first, and then you should be familiar with the differences between MySQL and PostgreSQL (the two most common open source SQLs), as well as Oracle (the dominant proprietary SQL).

Then you will want to learn about large scale systems that are too big for SQL, such as NOSQL.

In terms of security, the first thing you want to learn is SQL injection attacks: what they are, how they work, where they come from, and what you can do to block them.

Learn about database integrity — how data bases can get screwed up and out of sync and lose data or have incorrect data — and how to maintain database integrity.

And learn about optimizing databases for various purposes, including reducing the load on the system, increasing transaction speed, and decreasing storage requirements.

interactive queries

If you need to run a single interactive query on a particular MySQL database, use the `-e` flag.

```
$ mysql DBname -e "select * from table_foo;"
```

resetting auto_increment

The following command will reset the `auto_increment` value for a designated table:


```
ALTER TABLE TableName AUTO_INCREMENT = 0;
```

official keywords

The following is the list of the keywords for the official SQL standard:

ALL	DELETE	INTO	REFERENCES
AND	DESC	IS	ROLLBACK
ANY	DISTINCT	KEY	SCHEMA
AS	DOUBLE	LANGUAGE	SECTION
ASC	END	LIKE	SELECT
AUTHORIZATION	ESCAPE	MAX	SET
AVG	EXEC	MIN	SMALLINT
BEGIN	EXISTS	MODULE	SOME
BETWEEN	FETCH	NOT	SQL
BY	FLOAT	NULL	SQLCODE
CHAR	FOR	NUMERIC	SQLERROR
CHARACTER	FOREIGN	OF	SUM
CHECK	FORTRAN	ON	TABLE
CLOSE	FOUND	OPEN	TO
COBOL	FROM	OPTION	UNION
COMMIT	GO	OR	UNIQUE
CONTINUE	GOTO	ORDER	UPDATE
COUNT	GRANT	PASCAL	USER
CREATE	GROUP	PLI	VALUES
CURRENT	HAVING	PRECISION	VIEW
CURSOR	IN	PRIMARY	WHENEVER
DEC	INDICATOR	PRIVILEGES	WHERE
DECIMAL	INSERT	PROCEDURE	WITH
DECLARE	INT	PUBLIC	WORK
DEFAULT	INTEGER	REAL	

other

On November 8, 2010, Ramesh Natarajan named this the number 45 most frequently used Unix/Linux command at this web page [50 Most Frequently Used UNIX / Linux Commands \(With Examples\)](#).

PHP

chapter 88

summary

This chapter looks at `php`, a UNIX (and Linux) command, including both running shell scripts from a web browser and running PHP from the shell.

`php` is used to run a CLI version of PHP.

php script example

This example assumes that you have created the `scripts` directory in your home directory.

Create a `php` script called `script.php` and save it in the new `scripts` directory (folder):

```
<?php
echo "Hello World!"
?>
```

Notice that we skipped the `chmod` step typical for activating shell scripts.

Run your new script by running the `php` program with your script as the file to execute:

```
$ php ~/scripts/script.php
Hello World!
$
```

Note that the shell does *not* render HTML, so if you run a web script, you will see raw HTML, CSS, and JavaScript as plain text in your terminal window.

You can run `perl`, `ruby`, and `python` scripts in the same manner.

running shell from PHP

You can run shell commands and shell scripts from PHP in Apache by using either the `shell_exec` function or backticks.

The `shell_exec` function in PHP takes a shell command as a string, runs that command (or command list) in shell, and returns the result as a string. You can assign the result to a string variable and then output those results to a web browser, with or without additional processing. Use the `<pre>` tag to have the browser use the UNIX new line characters.

```
<php
$linesofoutput = shell_exec('ls');
echo '<pre>'.$linseofoutput.'</pre>';
?>
```

You can also use the backtick (or back quote) character (```).

```
<php
$linesofoutput = `ls`;
echo '<pre>'.$linseofoutput.'</pre>';
?>
```

You cannot combine both methods. This is useful, because you might actually want to send the backticks to the shell. If you are using backticks to run a shell command or command list, you can escape internal backticks to send them to the shell.

web security

Most system administrators disable `shell_exec()`. When `shell_exec` is disabled, the PHP script will be unable to run any shell commands.

If you enable shell access, you must guarantee that web visitor submitted input is never sent to the command shell without thorough scrubbing or crackers will be able to take over your server.

The difficulty with that “guarantee” is that there is probably a lot of PHP you didn’t write, such as WordPress, a PEAR package, off-the-shelf software, etc.

Hence the rule: disable `shell_exec()` and similar functions for any public facing server. Thanks to Stuart Beeton for emphasizing this point.

command line PHP

PHP is available both as a CGI binary (for Apache) and a CLI binary (for the shell).

Use the `-v` option to find out how your CLI copy of PHP is set up.

```
$ php -v
PHP 5.3.15 with Suhosin-Patch (cli) (built: Jul 31 2012 14:49:18)
Copyright (c) 1997-2012 The PHP Group
Zend Engine v2.3.0, Copyright (c) 1998-2012 Zend Technologies
$
```

Notice that the above output indicated the cli version.

PHP defaults

The CLI version of PHP does not send out any HTTP headers, because the shell doesn't understand them and instead expects plain text.

The CLI version of PHP does not change the working directory to that of the script. For a web server, you want to find all the files from the current web base. For a script running in the shell, you want the script or operator to make the decision. This allows a PHP script running in the shell to be generic and simply run in the current working directory.

The CLI version of PHP has several *php.ini* options overridden by default. These changes are enforced after the *php.ini* file is run, so you can't change them in the configuration file, although you can change them during runtime.

- `html_errors` is FALSE (because the shell is cluttered by uninterpreted HTML tags).
- `implicit_flush` is TRUE because the shell should receive immediate outputs of `print`, `echo`, and similar commands rather than having them held in a buffer.
- `max_execution_time` is 0 (unlimited) because a shell environment might run very much more complex scripts than those in a typical web-based script.
- `register_argc_argv` is TRUE because the PHP script will need to process the command line arguments. The PHP variable `$argc` has the number of arguments passed and the variable `$argv` is an array of the actual arguments. These values are also in the `$_SERVER` array, as `$_SERVER['argv']` and `$_SERVER['argc']`.
- `output_buffering` is hardcoded FALSE< but the output buffering functions are available.
- `max_input_time` is FALSE because PHP CLI does not support GET, POST, or file uploads.

running a file in PHP

Use the `-f` option to parse and execute a designated file in PHP.

```
$ php -f filename.php
$
```

Note that the `-f` switch is optional. You will get the same result if you leave off the `-f` option and just give the filename. You get the exact same results from:

```
$ php filename.php
$
```

Note that the `.php` extension is for your convenience. The CLI PHP will run any file as if it were a PHP file, without regard to the extension type.

run PHP interactively

Use the `-a` switch to run PHP interactively. You will receive a secondary prompt and each line of PHP code will be run as soon as a `;` or `}` is found. Do not include the script tags `<?>` and `?>`.

```
$ php -a
asdf
$
```

run single line of PHP

Use the `-r` switch to run some particular PHP code immediately. This is useful inside of a script. Do not include the script tags `<?>` and `?>`.

```
$ php -r 'echo "hello world\n"'
hello world
$
```

You need to carefully watch your use of quoting and escaping to avoid problems with the command line variable substitution done by the shell.

syntax check

Use the `-l` switch to perform a syntax check on the PHP code.

```
$ php -l filename
No syntax error detected in <filename>
```

```
$
```

If there are no errors, you will get the message `No syntax errors detected in <filename>` on standard output and the shell return code is `0`.

If there are no errors, you will get the message `Errors parsing <filename>` on standard output and the shell return code is `-1`.

This option does not work with the `-r` option.

use PHP in a pipeline

PHP will accept PHP code from standard input (STDIN). Note this means that the previous commands are creating PHP code, not passing data for a PHP file to use as input.

```
$ some_application | some_filter | php | some_command >
final_output.txt
$
```

combinations

You cannot combine any of the three ways of executing PHP code (file, `-r`, and STDIN). It would be great if there was a way to accept data from STDIN and name a PHP file to process it, with the output continuing as STDOUT to the next command in the shell pipeline, but this isn't currently a choice.

arguments

PHP can receive an unlimited number of arguments. Unfortunately, the shell has a limit on the number of total characters which can be passed to a command.

An argument that starts with a `-` will be used by the PHP interpreter. Use the argument list separator `--` and all of the arguments that follow will be sent to the PHP script through the `$argv` variable.

shebang

You can insert the shebang line with the correct location of the CLI PHP program and set the execution attributes of the file. The file needs the normal PHP starting and end tags.

Use the `type` command to find the location of your CLI copy of PHP.

```
$ type php
php is /usr/bin/php
$
```

Add that location to the standard shebang as the first line of the file.

```
#!/usr/bin/php
```

Set the file to execute:

```
$ chmod +x filename.php
$
```

The shebang line has no effect on Windows, but also causes no harm because it is also a valid PHP comment. Therefore include the shebang line for true cross-platform PHP scripts.

shebang example

Create a sample script file.

```
#!/usr/bin/php
<?php
var_dump($argv);
?>
```

Make the script file executable and then run it.

```
$ chmod +x phptest.php
$ ./phptest.php -h -- foo
array(4) {
    [0]=>
    string(13) "./phptest.php"
    [1]=>
    string(2) "-h"
    [2]=>
    string(2) "--"
    [3]=>
    string(3) "foo"
}
$
```


Perl

chapter 89

summary

This chapter looks at `perl`, a UNIX (and Linux) command, including both running shell scripts from a web browser and running `Perl` from the shell.

`perl` is used to run a CLI version of `Perl`.

getting started

Check that `Perl` is actually running on your system by typing `perl -v` from the command line. Your exact results may vary.

```
$ perl -v

This is perl 5, version 12, subversion 4 (v5.12.4) built for
darwin-thread-multi-2level
(with 2 registered patches, see perl -V for more detail)

Copyright 1987-2010, Larry Wall

Perl may be copied only under the terms of either the Artistic
License or the
  GNU General Public License, which may be found in the Perl 5
source kit.

Complete documentation for Perl, including FAQ lists, should be
found on
  this system using "man perl" or "perldoc perl". If you have access
to the
  Internet, point your browser at http://www.perl.org/, the Perl
Home Page.

$
```

Use `which` to determine the location of your local copy of `Perl`:

```
$ which perl
```

```
This is perl 5, version 12, subversion 4 (v5.12.4) built for
darwin-thread-multi-2level
/usr/bin/perl
$
```

This example assumes that you have created the `scripts` directory in your home directory.

Create a **Perl** script called `script.pl` and save it in the new `scripts` directory (folder):

```
#!/usr/bin/perl
print "Hello World!";
```

Notice that we skipped the `chmod` step typical for activating shell scripts.

Run your new script by running the `perl` program with your script as the file to execute:

```
$ perl ~/scripts/script.pl
Hello World!
$
```

brief history

Perl created by Larry Wall in 1986. **Perl** was originally intended as a utility to create reports. **Perl** stands for Practical Extraction and reporting Language.

Tcl

chapter 90

summary

This chapter looks at `tcl`, a Unix (and Linux) command, including both running shell scripts from a web browser and running Tcl from the shell.

`tcl` is used to run a CLI version of Tcl.

getting started

Use `which` to determine the location of your local copy of Tcl (and to make sure you actually have a copy):

```
$ which tclsh
/usr/bin/tclsh
$
```

This example assumes that you have created the `scripts` directory in your home directory.

Create a tcl script called `script.tcl` and save it in the new scripts directory (folder):

```
#!/usr/bin/tclsh
puts "Hello World!"
```

Run your new script by running the `tclsh` program with your script as the file to execute:

```
$ tclsh ~/scripts/script.tcl
Hello World!
$
```

text-based interactive version

To run a text-only version of `tclsh`, simply type `tclsh` (and return) from the BASH command line and you should get a percent sign (%) prompt. This means you have successfully entered `tclsh`.

```
$ tclsh  
%
```

Now that you are in `tclsh`, type `info tclversion` to see which version.

```
% info tclversion  
8.5  
%
```

And to see Tcl make use of a simple BASH command, type `ls -l`:

```
% ls -l  
a regular listing of files  
%
```

And to return back to BASH, type `exit`:

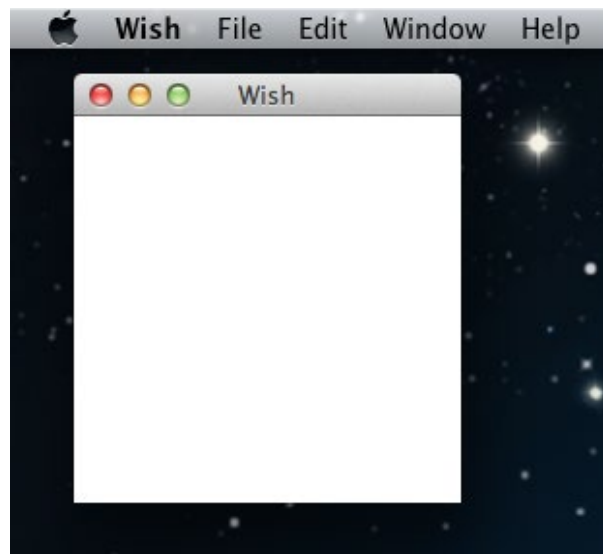
```
% exit  
$
```

visual interactive version

Now test out the visual version by typing `wish` (assuming it is installed and you have X-Windows running).

```
$ wish  
%
```

The contents of your Terminal window will not change from the text-only version, but you will get an additional display window that is controlled from the command line.



And return to BASH:

```
% exit  
$
```

brief history

Tcl was created in the late 1980s by Dr. John Osterhout. Tcl stands for Tool Command Language.

installing software from source code

chapter 91

summary

This chapter looks at installing software from source code.

While it is possible to do a lot with just preinstalled software and precompiled software, those working with large systems will sooner or later need to download the raw source code and use that source code to create their own copy of the latest version of some software on their servers or other computer systems.

gcc

The vast majority of open source software is written in the **C** programming language. The GNU foundation C compiler, known as `gcc`, is the most commonly used C compiler.

Apple's Mac OS X Developer Tools used to include a copy of `gcc`, but also included an Apple specific variation that includes specialized features useful for

development of Macintosh, iPhone, and iPad software.

The Apple Macintosh switched to the `clang` C compiler with Mac OS X 10.6 Snow Leopard.

Xcode

Xcode is an Apple integrated development environment. It includes the Instruments analysis tool, iOS Simulator (useful for testing your software on the Mac before it is ready for deployment to real devices), and the latest Mac OS X and iOS SDKs.

Fink

Fink (German for the bird finch) is an open source program that automates the process of downloading, configuring, compiling, and installing hundreds of software packages from the original source code.

Homebrew

Homebrew is a free and open-source software package management system that simplifies the installation of software on Apple's macOS as well as Linux.

manual installation

There are two major methods for manually installing software from source: the standard method (used for most Linux software) and the Perl method (used for `Perl` modules).

HTML

HTML

summary

This chapter looks at HTML.

HTML entities

Reserved Characters in HTML

Some characters are reserved in HTML and XHTML. For example, you cannot use the greater than or less than signs within your text because the browser could mistake them for markup.

HTML and XHTML processors must support the five special characters listed in the table below:

Character	Entity Number	Entity Name	Description
"	"	"	quotation mark
'	'	' (does not work in IE)	apostrophe
&	&	&	ampersand
<	<	<	less-than
>	>	>	greater-than

Note: Entity names are case sensitive!

ISO 8859-1 Symbols

Character	Entity Number	Entity Name	Description
	 	 	non-breaking space
¡	¡	¡	inverted exclamation mark
¢	¢	¢	cent
£	£	£	pound
¤	¤	¤	currency
¥	¥	¥	yen
	¦	¦	broken vertical bar
§	§	§	section
¨	¨	¨	spacing diaeresis
©	©	©	copyright
ª	ª	ª	feminine ordinal indicator
«	«	«	angle quotation mark (left)
¬	¬	¬	negation
	­	­	soft hyphen
®	®	®	registered trademark
-	¯	¯	spacing macron
°	°	°	degree
±	±	±	plus-or-minus
²	²	²	superscript 2
³	³	³	superscript 3
´	´	´	spacing acute
µ	µ	µ	micro
¶	¶	¶	paragraph
·	·	·	middle dot

¸	¸	¸	spacing cedilla
¹	¹	¹	superscript 1
º	º	º	masculine ordinal indicator
»	»	»	angle quotation mark (right)
¼	¼	¼	fraction 1/4
½	½	½	fraction 1/2
¾	¾	¾	fraction 3/4
¿	¿	¿	inverted question mark
×	×	×	multiplication
÷	÷	÷	division

ISO 8859-1 Characters

Character	Entity Number	Entity Name	Description
À	À	À	capital a, grave accent
Á	Á	Á	capital a, acute accent
Â	Â	Â	capital a, circumflex accent
Ã	Ã	Ã	capital a, tilde
Ä	Ä	Ä	capital a, umlaut mark
Å	Å	Å	capital a, ring
Æ	Æ	Æ	capital ae
Ç	Ç	Ç	capital c, cedilla
È	È	È	capital e, grave accent
É	É	É	capital e, acute accent

Ê	Ê	Ê	capital e, circumflex accent
Ë	Ë	Ë	capital e, umlaut mark
Ì	Ì	Ì	capital i, grave accent
Í	Í	Í	capital i, acute accent
Î	Î	Î	capital i, circumflex accent
Ï	Ï	Ï	capital i, umlaut mark
Ð	Ð	Ð	capital eth, Icelandic
Ñ	Ñ	Ñ	capital n, tilde
Ò	Ò	Ò	capital o, grave accent
Ó	Ó	Ó	capital o, acute accent
Ô	Ô	Ô	capital o, circumflex accent
Õ	Õ	Õ	capital o, tilde
Ö	Ö	Ö	capital o, umlaut mark
Ø	Ø	Ø	capital o, slash
Ù	Ù	Ù	capital u, grave accent
Ú	Ú	Ú	capital u, acute accent
Û	Û	Û	capital u, circumflex accent
Ü	Ü	Ü	capital u, umlaut mark
Ý	Ý	Ý	capital y, acute accent
Þ	Þ	Þ	capital THORN, Icelandic

ß	ß	ß	small sharp s, German
à	à	à	small a, grave accent
á	á	á	small a, acute accent
â	â	â	small a, circumflex accent
ã	ã	ã	small a, tilde
ä	ä	ä	small a, umlaut mark
å	å	å	small a, ring
æ	æ	æ	small æ
ç	ç	ç	small c, cedilla
è	è	è	small e, grave accent
é	é	é	small e, acute accent
ê	ê	ê	small e, circumflex accent
ë	ë	ë	small e, umlaut mark
ì	ì	ì	small i, grave accent
í	í	í	small i, acute accent
î	î	î	small i, circumflex accent
ï	ï	ï	small i, umlaut mark
ð	ð	ð	small eth, Icelandic
ñ	ñ	ñ	small n, tilde
ò	ò	ò	small o, grave accent
ó	ó	ó	small o, acute accent
ô	ô	ô	small o, circumflex accent
õ	õ	õ	small o, tilde
ö	ö	ö	small o, umlaut mark
ø	ø	ø	small o, slash
ù	ù	ù	small u, grave accent
ú	ú	ú	small u, acute accent

û	û	û	small u, circumflex accent
ü	ü	ü	small u, umlaut mark
ý	ý	ý	small y, acute accent
þ	þ	þ	small thorn, Icelandic
ÿ	ÿ	ÿ	small y, umlaut mark

Math Symbols Supported by HTML

Character	Entity Number	Entity Name	Description
∀	∀	∀	for all
∂	∂	∂	part
∃	∃	&exists;	exists
∅	∅	∅	empty
∇	∇	∇	nabla
∈	∈	∈	isin
∉	∉	∉	notin
⊃	∋	∋	ni
∏	∏	∏	prod
∑	∑	∑	sum
−	−	−	minus
*	∗	∗	lowast
√	√	√	square root
∝	∝	∝	proportional to
∞	∞	∞	infinity
∠	∠	∠	angle
∧	∧	∧	and
∨	∨	∨	or
∩	∩	∩	cap
∪	∪	∪	cup
∫	∫	∫	integral

\therefore	<code>&#8756;</code>	<code>&there4;</code>	therefore
\sim	<code>&#8764;</code>	<code>&sim;</code>	similar to
\cong	<code>&#8773;</code>	<code>&cong;</code>	approximately equal
\approx	<code>&#8776;</code>	<code>&asymp;</code>	almost equal
\neq	<code>&#8800;</code>	<code>&ne;</code>	not equal
\equiv	<code>&#8801;</code>	<code>&equiv;</code>	equivalent
\leq	<code>&#8804;</code>	<code>&le;</code>	less or equal
\geq	<code>&#8805;</code>	<code>&ge;</code>	greater or equal
\subset	<code>&#8834;</code>	<code>&sub;</code>	subset of
\supset	<code>&#8835;</code>	<code>&sup;</code>	superset of
$\not\subset$	<code>&#8836;</code>	<code>&nsup;</code>	not subset of
\subseteq	<code>&#8838;</code>	<code>&sube;</code>	subset or equal
\supseteq	<code>&#8839;</code>	<code>&supe;</code>	superset or equal
\oplus	<code>&#8853;</code>	<code>&oplus;</code>	circled plus
\otimes	<code>&#8855;</code>	<code>&otimes;</code>	circled times
\perp	<code>&#8869;</code>	<code>&perp;</code>	perpendicular
\cdot	<code>&#8901;</code>	<code>&sdot;</code>	dot operator

Greek Letters Supported by HTML

Character	Entity Number	Entity Name	Description
A	<code>&#913;</code>	<code>&Alpha;</code>	Alpha
B	<code>&#914;</code>	<code>&Beta;</code>	Beta
Γ	<code>&#915;</code>	<code>&Gamma;</code>	Gamma
Δ	<code>&#916;</code>	<code>&Delta;</code>	Delta
E	<code>&#917;</code>	<code>&Epsilon;</code>	Epsilon
Z	<code>&#918;</code>	<code>&Zeta;</code>	Zeta
H	<code>&#919;</code>	<code>&Eta;</code>	Eta
Θ	<code>&#920;</code>	<code>&Theta;</code>	Theta
I	<code>&#921;</code>	<code>&Iota;</code>	Iota
K	<code>&#922;</code>	<code>&Kappa;</code>	Kappa

Λ	Λ	Λ	Lambda
Μ	Μ	Μ	Mu
Ν	Ν	Ν	Nu
Ξ	Ξ	Ξ	Xi
Ο	Ο	Ο	Omicron
Π	Π	Π	Pi
Ρ	Ρ	Ρ	Rho
	undefined		Sigmaf
Σ	Σ	Σ	Sigma
Τ	Τ	Τ	Tau
Υ	Υ	Υ	Upsilon
Φ	Φ	Φ	Phi
Χ	Χ	Χ	Chi
Ψ	Ψ	Ψ	Psi
Ω	Ω	Ω	Omega
α	α	α	alpha
β	β	β	beta
γ	γ	γ	gamma
δ	δ	δ	delta
ε	ε	ε	epsilon
ζ	ζ	ζ	zeta
η	η	η	eta
θ	θ	θ	theta
ι	ι	ι	iota
κ	κ	κ	kappa
λ	λ	λ	lambda
μ	μ	μ	mu
ν	ν	ν	nu
ξ	ξ	ξ	xi
ο	ο	ο	omicron

π	π	π	pi
ρ	ρ	ρ	rho
ς	ς	ς	sigmaf
σ	σ	σ	sigma
τ	τ	τ	tau
υ	υ	υ	upsilon
φ	φ	φ	phi
χ	χ	χ	chi
ψ	ψ	ψ	psi
ω	ω	ω	omega
θ	ϑ	ϑ	theta symbol
Υ	ϒ	ϒ	upsilon symbol
ϖ	ϖ	ϖ	pi symbol

Other Entities Supported by HTML

Character	Entity Number	Entity Name	Description
Œ	Œ	Œ	capital ligature OE
œ	œ	œ	small ligature oe
Š	Š	Š	capital S with caron
š	š	š	small S with caron
Ÿ	Ÿ	Ÿ	capital Y with diaeres
f	ƒ	ƒ	f with hook
^	ˆ	ˆ	modifier letter circumflex accent
~	˜	˜	small tilde
	 	 	en space
	 	 	em space
	 	 	thin space
	‌	‌	zero width non-joiner

	‍	‍	zero width joiner
	‎	&lrn;	left-to-right mark
	‏	‏	right-to-left mark
–	–	–	en dash
—	—	—	em dash
‘	‘	‘	left single quotation mark
’	’	’	right single quotation mark
,	‚	‚	single low-9 quotation mark
“	“	“	left double quotation mark
”	”	”	right double quotation mark
„	„	„	double low-9 quotation mark
†	†	†	dagger
‡	‡	‡	double dagger
●	•	•	bullet
...	…	…	horizontal ellipsis
‰	‰	‰	per mille
′	′	′	minutes
″	″	″	seconds
<	‹	‹	single left angle quotation
>	›	›	single right angle quotation
—	‾	‾	overline
€	€	€	euro
™	™	™	trademark
←	←	←	left arrow

↑	↑	↑	up arrow
→	→	→	right arrow
↓	↓	↓	down arrow
↔	↔	↔	left right arrow
↵	↵	↵	carriage return arrow
⌈	⌈	⌈	left ceiling
⌋	⌉	⌉	right ceiling
⌊	⌊	⌊	left floor
⌋	⌋	⌋	right floor
◇	◊	◊	lozenge
♠	♠	♠	spade
♣	♣	♣	club
♥	♥	♥	heart
♦	♦	♦	diamond

evidence collection

evidence collection

summary

After you discover a security breach, you need to gather and preserve evidence.

The following is the full text of the Network Working Group RFC 3227 Guidelines for Evidence Collection and Archiving.

They allow reprints, as long as the reprint is in full without changes. So, the page numbers are from the original.

There is a strange artifact at the bottom of this page because Adobe Acrobat Pro rendering sucks. If you want to fund the creation of a decent PDF creator/editor program, please contact me.

RFC 3227

Network Working Group
Brezinski
Request for Comments: 3227
Tel
BCP: 55
Killalea
Category: Best Current
Practice

2002

neart.org

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In-Q-

T.

February

Guidelines for Evidence Collection and Archiving

Status of this Memo

This document specifies an Internet Best Current Practices for the Internet Community, and requests discussion and suggestions for improvements. Distribution of this memo is unlimited.

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Abstract

A "security incident" as defined in the "Internet Security Glossary", RFC 2828, is a security-relevant system event in which the system's security policy is disobeyed or otherwise breached. The purpose of this document is to provide System Administrators with guidelines on the collection and archiving of evidence relevant to such a security incident.

If evidence collection is done correctly, it is much more useful in apprehending the attacker, and stands a much greater chance of being admissible in the event of a prosecution.

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1 Introduction

A "security incident" as defined in [RFC2828] is a security-relevant

system event in which the system's security policy is disobeyed or otherwise breached. The purpose of this document is to provide System Administrators with guidelines on the collection and archiving of evidence relevant to such a security incident. It's not our intention to insist that all System Administrators rigidly follow these guidelines every time they have a security incident. Rather, we want to provide guidance on what they should do if they elect to collect and protect information relating to an intrusion.

Such collection represents a considerable effort on the part of the System Administrator. Great progress has been made in recent years to speed up the re-installation of the Operating System and to facilitate the reversion of a system to a 'known' state, thus making the 'easy option' even more attractive. Meanwhile little has been done to provide easy ways of archiving evidence (the difficult option). Further, increasing disk and memory capacities and the more widespread use of stealth and cover-your-tracks tactics by attackers have exacerbated the problem.

If evidence collection is done correctly, it is much more useful in apprehending the attacker, and stands a much greater chance of being admissible in the event of a prosecution.

You should use these guidelines as a basis for formulating your site's evidence collection procedures, and should incorporate your site's procedures into your Incident Handling documentation. The guidelines in this document may not be appropriate under all jurisdictions. Once you've formulated your site's evidence collection procedures, you should have law enforcement for your jurisdiction confirm that they're adequate.

1.1 Conventions Used in this Document

The key words "REQUIRED", "MUST", "MUST NOT", "SHOULD", "SHOULD NOT", and "MAY" in this document are to be interpreted as described in "Key words for use in RFCs to Indicate Requirement Levels" [RFC2119].

2 Guiding Principles during Evidence Collection

- Adhere to your site's Security Policy and engage the appropriate Incident Handling and Law Enforcement personnel.
- Capture as accurate a picture of the system as possible.
- Keep detailed notes. These should include dates and times. If possible generate an automatic transcript. (e.g., On Unix systems the 'script' program can be used, however the output file it generates should not be to media that is part of the evidence). Notes and print-outs should be signed and dated.
- Note the difference between the system clock and UTC. For each timestamp provided, indicate whether UTC or local time is used.
- Be prepared to testify (perhaps years later) outlining all actions you took and at what times. Detailed notes will be vital.
- Minimise changes to the data as you are collecting it. This is not limited to content changes; you should avoid updating file or directory access times.
- Remove external avenues for change.
- When confronted with a choice between collection and analysis you should do collection first and analysis later.
- Though it hardly needs stating, your procedures should be implementable. As with any aspect of an incident response policy, procedures should be tested to ensure feasibility, particularly in a crisis. If possible procedures should be automated for reasons

of speed and accuracy. Be methodical.

- For each device, a methodical approach should be adopted which follows the guidelines laid down in your collection procedure. Speed will often be critical so where there are a number of devices requiring examination it may be appropriate to spread the work among your team to collect the evidence in parallel. However on a single given system collection should be done step by step.

- Proceed from the volatile to the less volatile (see the Order of Volatility below).

- You should make a bit-level copy of the system's media. If you wish to do forensics analysis you should make a bit-level copy of your evidence copy for that purpose, as your analysis will almost certainly alter file access times. Avoid doing forensics on the evidence copy.

2.1 Order of Volatility

When collecting evidence you should proceed from the volatile to the less volatile. Here is an example order of volatility for a typical system.

- registers, cache
- routing table, arp cache, process table, kernel statistics, memory
- temporary file systems
- disk
- remote logging and monitoring data that is relevant to the system in question
- physical configuration, network topology
- archival media

2.2 Things to avoid

It's all too easy to destroy evidence, however inadvertently.

- Don't shutdown until you've completed evidence collection. Much evidence may be lost and the attacker may have altered the startup/shutdown scripts/services to destroy evidence.
- Don't trust the programs on the system. Run your evidence gathering programs from appropriately protected media (see below).
- Don't run programs that modify the access time of all files on the system (e.g., 'tar' or 'xcopy').
- When removing external avenues for change note that simply disconnecting or filtering from the network may trigger "deadman switches" that detect when they're off the net and wipe evidence.

2.3 Privacy Considerations

- Respect the privacy rules and guidelines of your company and your legal jurisdiction. In particular, make sure no information collected along with the evidence you are searching for is available to anyone who would not normally have access to this information. This includes access to log files (which may reveal patterns of user behaviour) as well as personal data files.
- o not intrude on people's privacy without strong justification. In particular, do not collect information from areas you do not

normally have reason to access (such as personal file stores) unless you have sufficient indication that there is a real incident.

- Make sure you have the backing of your company's established procedures in taking the steps you do to collect evidence of an incident.

2.4 Legal Considerations

Computer evidence needs to be

- Admissible: It must conform to certain legal rules before it can be put before a court.
- Authentic: It must be possible to positively tie evidentiary material to the incident.
- Complete: It must tell the whole story and not just a particular perspective.
- Reliable: There must be nothing about how the evidence was collected and subsequently handled that casts doubt about its authenticity and veracity.
- Believable: It must be readily believable and understandable by a court.

3 The Collection Procedure

Your collection procedures should be as detailed as possible. As is the case with your overall Incident Handling procedures, they should be unambiguous, and should minimise the amount of decision-making needed during the collection process.

3.2 Transparency

The methods used to collect evidence should be transparent and reproducible. You should be prepared to reproduce precisely the methods you used, and have those methods tested by independent experts.

3.3 Collection Steps

- Where is the evidence? List what systems were involved in the incident and from which evidence will be collected.
- Establish what is likely to be relevant and admissible. When in doubt err on the side of collecting too much rather than not enough.
- For each system, obtain the relevant order of volatility.
- Remove external avenues for change.
- Following the order of volatility, collect the evidence with tools as discussed in Section 5.
- Record the extent of the system's clock drift.
- Question what else may be evidence as you work through the collection steps.
- Document each step.
- Don't forget the people involved. Make notes of who was there and what were they doing, what they observed and how they reacted.

Where feasible you should consider generating checksums and cryptographically signing the collected evidence, as this may make it easier to preserve a strong chain of evidence. In doing so you must not

alter the evidence.

4 The Archiving Procedure

Evidence must be strictly secured. In addition, the Chain of Custody needs to be clearly documented.

4.1 Chain of Custody

You should be able to clearly describe how the evidence was found, how it was handled and everything that happened to it.

The following need to be documented

- Where, when, and by whom was the evidence discovered and collected.
- Where, when and by whom was the evidence handled or examined.
- Who had custody of the evidence, during what period. How was it stored.
- When the evidence changed custody, when and how did the transfer occur (include shipping numbers, etc.).

4.2 Where and how to Archive

If possible commonly used media (rather than some obscure storage media) should be used for archiving.

Access to evidence should be extremely restricted, and should be clearly documented. It should be possible to detect unauthorised access.

5 Tools you'll need

You should have the programs you need to do evidence collection and forensics on read-only media (e.g., a CD). You should have prepared such a set of tools for each of the Operating Systems that you manage in advance of having to use it.

Your set of tools should include the following:

- a program for examining processes (e.g., 'ps').
- programs for examining system state (e.g., 'showrev', 'ifconfig', 'netstat', 'arp').
- a program for doing bit-to-bit copies (e.g., 'dd', 'SafeBack').
- programs for generating checksums and signatures (e.g., 'shasum', a checksum-enabled 'dd', 'SafeBack', 'pgp').
- programs for generating core images and for examining them (e.g., 'gcore', 'gdb').
- scripts to automate evidence collection (e.g., The Coroner's Toolkit [FAR1999]).

The programs in your set of tools should be statically linked, and should not require the use of any libraries other than those on the read-only media. Even then, since modern rootkits may be installed through loadable kernel modules, you should consider that your tools might not be giving you a full picture of the system.

You should be prepared to testify to the authenticity and reliability of the tools that you use.

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7 Acknowledgements

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8 Security Considerations

This entire document discusses security issues.

9 Authors' Addresses

Dominique Brezinski
In-Q-Tel
1000 Wilson Blvd., Ste. 2900
Arlington, VA 22209
USA

E-Mail: dbrezinski@In-Q-Tel.org

Tom Killalea
Lisi/n na Bro/n
Be/al A/tha na Muice
Co. Mhaigh Eo
IRELAND

Phone: +1 206 266-2196
E-Mail: tomk@neart.org

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command summaries

appendix A

This chapter provides a list of UNIX (Linux) command summaries.

shell commands, tools, and utilities

CONTROL

CONTROL-c Kills current process

a

a2ps Format an ASCII file for printing on a PostScript printer [Linux]
[alias](#) Create a command alias [builtin command in BASH]
apropos Search Help manual pages (man -k)
apt-get Search for and install software packages (Debian/Ubuntu)
aptitude Search for and install software packages (Debian/Ubuntu)
[arp](#) Display and modify the Internet-to-Ethernet address translation tables
aspell Spell Checker
[at](#) Schedule a job
[awk](#) Find and Replace text, database sort/validate/index

b

basename Strip directory and suffix from filenames
bash GNU Bourne-Again SHell
bc Arbitrary precision calculator language
bg Send to background
break Exit from a loop [builtin command in BASH]
builtin Run a shell builtin

bzip2	Compress or decompress file(s)
c	
cal	Displays a calendar [alternative layout using <code>ncal</code>]
case	Conditionally perform a command
cat	Concatenate and print (display) the contents of files
cd	Change Directory
cfdisk	Partition table manipulator for Linux
chgrp	Change group ownership
chmod	Change access permissions
chown	Change file owner and group
chroot	Run a command with a different root directory
chkconfig	System services (runlevel)
cksum	Print CRC checksum and byte counts
clear	Clears the terminal screen
cmp	Compare two files
comm	Compare two sorted files line by line
command	Run a command - ignoring shell functions [builtin command in BASH]
continue	Resume the next iteration of a loop [builtin command in BASH]
cp	Copy one or more files to another location
cron	Daemon to execute scheduled commands
crontab	Schedule a command to run at a later time
csplit	Split a file into context-determined pieces
cut	Divide a file into several parts
d	
date	Display or change the date and time
dc	Desk Calculator
dd	Convert and copy a file, write disk headers, boot records
ddrescue	Data recovery tool
declare	Declare variables and give them attributes [builtin command in BASH]
defaults	Set defaults [mac OS X]
df	Display drives and free disk space
dict	Look up a word at dict.org [Perl client script]
diff	Display the differences between two files
diff3	Show differences among three files
dig	DNS lookup
dir	Briefly list directory contents
dircolors	Color setup for <code>ls</code>
dirname	Convert a full pathname to just a path
dirs	Display list of remembered directories
dmesg	Print kernel & driver messages
du	Estimate file space usage
e	
echo	Display message on screen [builtin command in BASH]

egrep	Search file(s) for lines that match an extended expression
eject	Eject removable media
enable	Enable and disable builtin shell commands [builtin command in BASH]
env	Environment variables
ethtool	Ethernet card settings
eval	Evaluate several commands/arguments
exec	Execute a command
exit	Exit the shell
expect	Automate arbitrary applications accessed over a terminal
expand	Convert tabs to spaces
<u>export</u>	Set an environment variable
expr	Evaluate expressions
f	
false	Do nothing, unsuccessfully
fdformat	Low-level format a floppy disk
fdisk	Partition table manipulator for Linux
fg	Send job to foreground
fgrep	Search file(s) for lines that match a fixed string
file	Determine file type
<u>find</u>	Search for files that meet a desired criteria
fmt	Reformat paragraph text
fold	Wrap text to fit a specified width
for	Loop and expand <i>words</i> and execute <i>commands</i>
format	Format disks or tapes
<u>free</u>	Display memory usage
fsck	File system consistency check and repair
<u>ftp</u>	File Transfer Protocol
function	Define Function Macros
fuser	Identify/kill the process that is accessing a file
g	
gawk	Find and Replace text within file(s)
getopts	Parse positional parameters
<u>grep</u>	Search file(s) for lines that match a given pattern
groupadd	Add a user security group
groupdel	Delete a group
groupmod	Modify a group
groups	Print group names a user is in
<u>gzip</u>	Compress or decompress named file(s)
h	
hash	Remember the full pathname of a name argument
head	Output the first part of file(s)
help	Display help for a built-in command [builtin command in BASH]
history	Command History

hostname	Print or set system name
i	
iconv	Convert the character set of a file
id	Print user and group IDs
if	Conditionally perform a command
ifconfig	Configure a network interface
ifdown	Stop a network interface
ifup	Start a network interface up
import	Capture an X server screen and save the image to file
init	Set run level on Linux
install	Copy files and set attributes
j	
jobs	List active jobs [builtin command in BASH]
join	Join lines on a common field
jot	Print numeric sequences [BSD and Mac OS X]
k	
kill	Stop a process from running
killall	Kill processes by name
l	
less	Display output one screen at a time
let	Perform arithmetic on shell variables [builtin command in BASH]
ln	Make links between files
local	Create variables [builtin command in BASH]
locate	Find files
logname	Print current login name
logout	Exit a login shell [builtin command in BASH]
look	Display lines beginning with a given string
lpc	Line printer control program
lpr	Off line print
lprint	Print a file
lprntd	Abort a print job
lprntq	List the print queue
lprm	Remove jobs from the print queue
ls	List information about file(s)
lsof	List open files
m	
make	Compile or recompile a group of programs
man	Help manual
mkdir	make directory(s)
mkfifo	Make FIFOs (named pipes)
mkisofs	Create an hybrid ISO9660/JOLIET/HFS filesystem
mknod	Make block or character special files
mmv	Mass Move and rename (files)

more	Display output one screen at a time
mount	Mount a file system
mttools	Manipulate MS-DOS files
mtr	Network diagnostics (traceroute/ping)
mv	Move or rename files or directories
mysql	SQL database
n	
nano	Very simple editor
ncal	Displays a calendar [alternative layout using <code>cal</code>]
netstat	Networking information
nice	Set the priority of a command or job
nl	Number lines and write files
nohup	Run a command immune to hangups
notify-send	Send desktop notifications
nslookup	Query Internet name servers interactively
o	
open	Open a file in its default application
op	Operator access
p	
passwd	Modify a user password
paste	Merge lines of files
pathchk	Check file name portability
ping	Test a network connection
pkill	Stop processes from running
popd	Restore the previous value of the current directory
pr	Prepare files for printing
printcap	Printer capability database
printenv	Print environment variables
printf	Format and print data [builtin command in BASH]
ps	Process Status
pushd	Save and then change the current directory
pwd	Print Working Directory
q	
quota	Display disk usage and limits
quotacheck	Scan a file system for disk usage
quotactl	Set disk quotas
r	
ram	ram disk device
rcp	Remote copy files between two machines
read	Read a line from standard input [builtin command in BASH]
readarray	Read from stdin into an array variable [builtin command in BASH]
readonly	Mark variables/functions as readonly
reboot	Reboot the system

rename	Rename files
renice	Alter priority of running processes
remsync	Synchronize remote files via email
return	Return from a shell function
rev	Reverse lines of a file
<u>rm</u>	Remove files
rmdir	Remove directory(s)
<u>route</u>	Routing commands
<u>rpm</u>	Package manager
rsync	Remote file copy (Synchronize file trees)

S

screen	Multiplex terminal, run remote shells via SSH
<u>screencapture</u>	Create screenshots [Mac OS X]
scp	Secure copy (remote file copy)
sdiff	Merge two files interactively
<u>sed</u>	Stream Editor
select	Accept keyboard input
seq	Print numeric sequences
<u>service</u>	Run init scripts [System V]
set	Manipulate shell variables and functions
sftp	Secure File Transfer Program
shift	Shift positional parameters
shopt	Shell Options
<u>shred</u>	Secure delete
<u>shutdown</u>	Shutdown or restart the system
sleep	Delay for a specified time
slocate	Find files
<u>sort</u>	Sort text files
source	Run commands from a file [also .]
split	Split a file into fixed-size pieces
<u>ssh</u>	Secure Shell client (remote login program)
strace	Trace system calls and signals
<u>su</u>	Substitute User identity
<u>sudo</u>	Execute a command as another user [root]
sum	Print a checksum for a file
suspend	Suspend execution of this shell [builtin command in BASH]
symlink	Make a new name for a file
sync	Synchronize data on disk with memory
<u>sysstat</u>	Server toolset

t

<u>tail</u>	Output the last part of file
<u>tar</u>	Tape ARchiver
tee	Redirect output to multiple files

test	Evaluate a conditional expression
time	Measure program running time
times	User and system times
<u>touch</u>	Change file timestamps
<u>top</u>	List top processes running on the system
<u>traceroute</u>	Trace Route to Host
trap	Run a command when a signal is set (Bourne)
tr	Translate, squeeze, and/or delete characters
<u>troff</u>	Format text for print
true	Do nothing, successfully
tsort	Topological sort
tty	Print filename of terminal on stdin
type	Describe a command [builtin command in BASH]

u

ulimit	Limit user resources [builtin command in BASH]
umask	Users file creation mask
umount	Unmount a device
unalias	Remove an alias [builtin command in BASH]
<u>uname</u>	Print system information
unexpand	Convert spaces to tabs
uniq	Uniquify files
units	Convert units from one scale to another
unset	Remove variable or function names
unshar	Unpack shell archive scripts
until	Execute commands (until error)
<u>unzip</u>	Uncompress .zip files
<u>uptime</u>	Show uptime
useradd	Create new user account
userdel	Delete a user account
usermod	Modify user account
users	List users currently logged in
uuencode	Encode a binary file
uudecode	Decode a file created by uuencode

v

v	verbosely list directory contents (<code>ls -l -b</code>)
vdir	verbosely list directory contents (<code>ls -l -b</code>)
vi	ancient text editor
<u>vim</u>	modern version of ancient text editor
<u>vmstat</u>	Report Virtual Memory STATistics

w

<u>w</u>	Information on what each user is doing
wait	Wait for a process to complete [builtin command in BASH]
watch	Execute/display a program periodically

wc	Print byte, word, and line counts
<u>whatis</u>	Single line summary of a UNIX/Linux command
<u>whereis</u>	Search the user's \$path, man pages and source files for a program
which	Search the user's \$path for a program file
while	Loop
<u>who</u>	Print all usernames currently logged in
whoami	Print the current user id and name (<code>id -un</code>)
<u>wget</u>	Retrieve web pages or files via HTTP, HTTPS or FTP
write	Send a message to another user
x	
<u>xargs</u>	Execute utility, passing constructed argument list(s)
xdg-open	Open a file or URL in the user's preferred application
y	
yes	Print a string until interrupted
<u>yum</u>	Install, upgrade, or remove the Apache web server
punctuation	
.	Run a command script in the current shell
!	Run the last command again
#	Comment or Remark

history of computers

appendix B

summary

This appendix includes a brief history of computers, programming languages, and related topics.

history of computers

appendix B

summary

This appendix includes a brief history of computers, programming languages, and related topics.

The educational goal of this appendix is to familiarize the student with the history of computer programming. This appendix may provide a good overview for classes on the history of computers or history of programming languages.

There have been literally thousands of programming languages, many of which have been lost to history.

This history of programming languages also discusses the developments of computer hardware, computer operating systems, games, and technology. Games are included because often the major advances in computer hardware and software technologies first appeared in games. As one famous example, the roots of UNIX were the porting of an early computer game to new hardware.

Notes on the sumamry at the end of each year:

Year Year that items were introduced.

Operating Systems Operating systems introduced in that year.

Programming Languages Programming languages introduced. While only a few programming languages are appropriate for operating system work (such as Ada, BLISS, C, FORTRAN, and PL/I, the programming languages available with an operating system greatly influence the kinds of application programs available for an operating system.

Computers Computers and processors introduced. While a few operating systems run on a wide variety of computers (such as UNIX and Linux), most operating systems are closely or even intimately tied to their primary computer hardware. Speed listings in parenthesis are in operations per second (OPS), floating point operations per second (FLOPS), or clock speed (Hz).

Software Software programs introduced. Some major application programs that became available. Often the choice of operating system and computer was made by the need for specific programs or kinds of programs.

Games Games introduced. It may seem strange to include games in the time line, but many of the advances in computer hardware and software technologies first appeared in games. As one famous example, the roots of UNIX were the porting of an early computer game to new hardware.

Technology Major technology advances.

Theory Major advances in computer science or related theory.

antiquity

The earliest calculating machine was the abacus, believed to have been invented in Babylon around 2400 B.C.E. The abacus was used by many different cultures and civilizations, including the major advance known as the Chinese abacus from the 2nd Century B.C.E.

400s BCE

The Indian grammarian Panini wrote the *Ashtadhyayi* in the 5th Century B.C.E. In this work he created 3,959 rules of grammar for India's Sanskrit language. This important work is the oldest surviving linguistic book and introduced the idea of metarules, transformations, and recursions, all of which have important applications in computer science.

200s BCE

The first true computers were made with intricate gear systems by the Greeks. These computers turned out to be too delicate for the technological capabilities of the time and were abandoned as impractical. The Antikythera mechanism, discovered in a shipwreck in 1900, is an early mechanical analog computer from between 150 B.C.E. and 100 B.C.E.. The Antikythera mechanism used a system of 37 gears to compute the positions of the sun and the moon through the zodiac on the Egyptian calendar, and possibly also the fixed stars and five planets known in antiquity (Mercury, Venus, Mars, Jupiter, and Saturn) for any time in the future or past. The

system of gears added and subtracted angular velocities to compute differentials. The Antikythera mechanism could accurately predict eclipses and could draw up accurate astrological charts for important leaders. It is likely that the Antikythera mechanism was based on an astrological computer created by Archimedes of Syracuse in the 3rd century B.C.E.

100s BCE

The Chinese developed the South Pointing Chariot in 115 B.C.E. This device featured a differential gear, later used in modern times to make analog computers in the mid-20th Century.

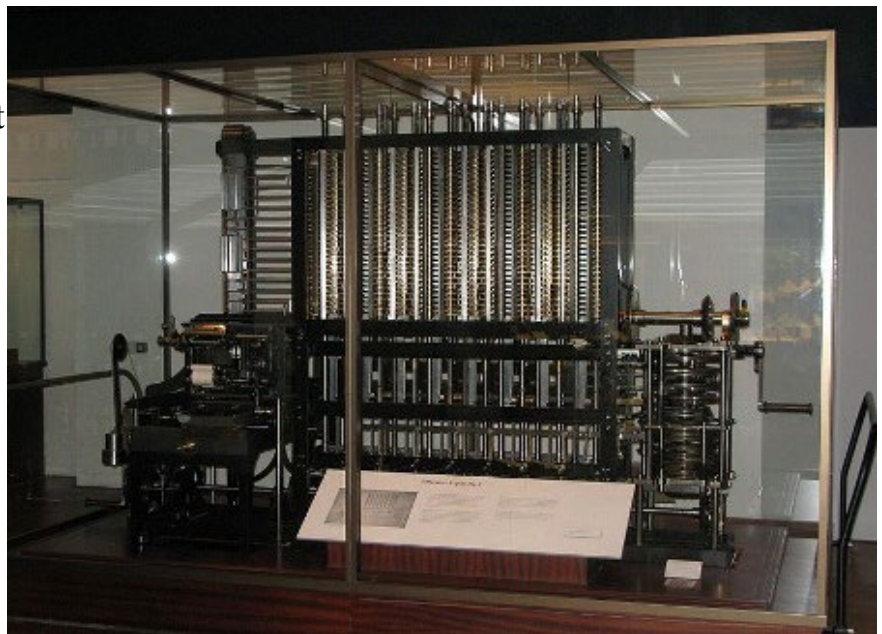
1400s

The first digital computers were made by the Inca using ropes and pulleys. Knots in the ropes served the purpose of binary digits. The Inca had several of these computers and used them for tax and government records. In addition to keeping track of taxes, the Inca computers held data bases on all of the resources of the Inca empire, allowing for efficient allocation of resources in response to local disasters (storms, drought, earthquakes, etc.). Spanish soldiers acting on orders of Roman Catholic priests destroyed all but one of the Inca computers in the mistaken belief that any device that could give accurate information about distant conditions must be a divination device powered by the Christian “Devil” (and many modern Luddites continue to view computers as Satanically possessed devices).

1800s

Charles Babbage created the difference engine and the analytical engine, often considered to be the first modern computers. Augusta Ada King, the Countess of Lovelace, was the first modern computer programmer.

In the 1800s, the first computers were programmable devices for controlling the weaving machines in the factories of the Industrial Revolution. Created by Charles Babbage, these early computers used Punch cards as data storage (the cards contained the control codes for the various patterns). These cards were very similar to the famous Hollerith cards developed later. The first computer programmer was Lady Ada, for whom the **Ada** programming language is named.



In 1822 Charles Babbage proposed a difference engine for automated calculating. In 1933

Babbage started work on his Analytical Engine, a mechanical computer with all of the elements of a modern computer, including control, arithmetic, and memory, but the technology of the day couldn't produce gears with enough precision or reliability to make his computer possible. The Analytical Engine would have been programmed with Jacquard's punched cards. Babbage designed the Difference Engine No.2. Lady Ada Lovelace wrote a program for the Analytical Engine that would have correctly calculated a sequence of Bernoulli numbers, but was never able to test her program because the machine wasn't built.

George Boole introduced what is now called Boolean algebra in 1854. This branch of mathematics was essential for creating the complex circuits in modern electronic digital computers.

In 1871, James Clerk Maxwell introduced his thought experiment, Maxwell's demon, and a possible violation of the Second Law of Thermodynamics. This thought experiment plays an important role in quantum physics and information theory.

In 1893, Jacques Salomon Hadamard proved his inequality of determinants, which led to the discovery of Hadamard matrices, which are the foundation for the Hadamard Gate in quantum computing.

1900s

In the 1900s, researchers started experimenting with both analog and digital computers using vacuum tubes. Some of the most successful early computers were analog computers, capable of performing advanced calculus problems rather quickly. But the real future of computing was digital rather than analog. Building on the technology and math used for telephone and telegraph switching networks, researchers started building the first electronic digital computers.

1914

Theory: Leonardo Torres y Quevedo first proposed floating point arithmetic in Madrid in 1914. Konrad Zuse independently proposed the same idea in Berlin in 1936 and built it into the hardware of his Zuse computer. George Stibitz also independently proposed the idea in New Jersey in 1939.

1925

Theory: Wolfgang Pauli invents the Pauli matrices, which are the basis for the Pauli-X, Pauli-Y, and Pauli-Z Gates in quantum computing.

1936

Theory: Alan Turing invents the Turing machine in his paper "On Computable Numbers, with an Application to the *Entscheidungsproblem*".

1938

Computers: Zuse Z1 (Germany, 1 OPS, first mechanical programmable binary computer, storage for a total of 64 numbers stored as 22 bit floating point numbers with 7-bit exponent, 15-bit significanda [one implicit bit], and sign bit); Konrad Zuse called his floating point hardware “semi-logarithmic notation” and included the ability to handle infinity and undefined.

1941

The first modern computer was the German Zuse computer (Z3) in 1941.

Computers: Atanasoff-Berry Computer; Zuse Z3 (Germany, 20 OPS, added floating point exceptions, plus and minus infinity, and undefined)

1942

Computers: work started on Zuse Z4

1943

In 1943 Howard Aiken of Harvard University created the Harvard Mark I. The Mark I was primarily mechanical.

Computers: Harvard Mark I (U.S.); Colossus 1 (U.K., 5 kOPS)

1944

In 1944 Howard Aiken of Harvard University created the Harvard Mark II. While the Mark I was primarily mechanical, the Mark II was primarily based on reed relays. Telephone and telegraph companies had been using reed relays for the logic circuits needed for large scale switching networks.

Computers: Colossus 2 (U.K., single processor, 25 kOPS); Harvard Mark II and AT&T Bell Laboratories' Model V (both relay computers) were the first American computers to include floating point hardware

1945

Plankalkül (Plan Calculus), created by Konrad Zuse for the Z3 computer in Nazi Germany, may have been the first programming language (other than assemblers). This was a surprisingly advanced programming language, with many features that didn't appear again until the 1980s.

Programming Languages: Plankalkül

Computers: Zuse Z4 (relay based computer, first commercial computer)

von Neumann architecture

John Louis von Neumann, mathematician (born János von Neumann 28 December 1903 in Budapest, Hungary, died 8 February 1957 in Washington, D.C.), proposed the *stored program concept* while professor of mathematics (one of the original six) at Princeton University's Institute for Advanced Studies, in which programs (code) are stored in the same memory as data. The computer knows the difference between code and data by which it is attempting to access at any given moment. When evaluating code, the binary numbers are decoded by some kind of physical logic circuits (later other methods, such as microprogramming, were introduced), and then the instructions are run in hardware. This design is called **von Neumann architecture** and has been used in almost every digital computer ever made.

Von Neumann architecture introduced flexibility to computers. Previous computers had their programming hard wired into the computer. A particular computer could only do one task (at the time, mostly building artillery tables) and had to be physically rewired to do any new task.

By using numeric codes, von Neumann computers could be reprogrammed for a wide variety of problems, with the decode logic remaining the same.

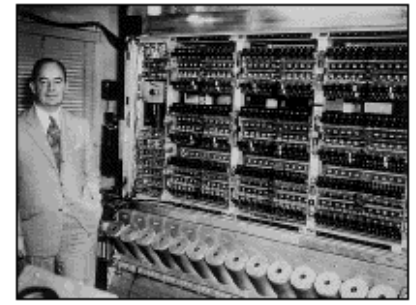
As processors (especially super computers) get ever faster, the *von Neumann bottleneck* is starting to become an issue. With data and code both being accessed over the same circuit lines, the processor has to wait for one while the other is being fetched (or written). Well designed data and code caches help, but only when the requested access is already loaded into cache. Some researchers are now experimenting with **Harvard architecture** to solve the von Neumann bottleneck. In Harvard architecture, named for Howard Aiken's experimental Harvard Mark I (ASCC) calculator [computer] at Harvard University, a second set of data and address lines along with a second set of memory are set aside for executable code, removing part of the conflict with memory accesses for data.

Von Neumann became an American citizen in 1933 to be eligible to help on top secret work during World War II. There is a story that Oskar Morganstern coached von Neumann and Kurt Gödel on the U.S. Constitution and American history while driving them to their immigration interview. Morganstern asked if they had any questions, and Gödel replied that he had no questions, but had found some logical inconsistencies in the Constitution that he wanted to ask the Immigration officers about. Morganstern recommended that he not ask questions, but just answer them.

Von Neumann occasionally worked with Alan Turing in 1936 through 1938 when Turing was a graduate student at Princeton. Von Neumann was exposed to the concepts of logical design and universal machine proposed in Turing's 1934 paper "On Computable Numbers with an Application to the Entscheidungs-problem".

Von Neumann worked with such early computers as the Harvard Mark I, ENIAC, EDVAC, and his own IAS computer.

Early research into computers involved doing the computations to create tables, especially artillery firing tables. Von Neumann was convinced that the future of computers involved applied mathematics to solve specific problems rather than mere table generation. Von Neumann was the first person to use computers for mathematical physics and economics, proving the utility of a general purpose computer.



Von Neumann proposed the concept of stored programs in the 1945 paper “First Draft of a Report on the EDVAC”. Influenced by the idea, Maurice Wilkes of the Cambridge University Mathematical Laboratory designed and built the EDSAC, the world’s first operational, production, stored-program computer.

The first stored computer program ran on the Manchester Mark I [computer] on June 21, 1948.

Von Neumann foresaw the advantages of parallelism in computers, but because of construction limitations of the time, he worked on sequential systems.

Von Neumann advocated the adoption of the bit as the measurement of computer memory and solved many of the problems regarding obtaining reliable answers from unreliable computer components.

Interestingly, von Neumann was opposed to the idea of compilers. When shown the idea for FORTRAN in 1954, von Neumann asked “Why would you want more than machine language?”. Von Neumann had graduate students hand assemble programs into binary code for the IAS machine. Donald Gillies, a student at Princeton, created an assembler to do the work. Von Neumann was angry, claiming “It is a waste of a valuable scientific computing instrument to use it to do clerical work”.

Von Neumann also did important work in set theory (including measure theory), the mathematical foundation for quantum theory (including statistical mechanics), self-adjoint algebras of bounded linear operators on a Hilbert space closed in weak operator topology, non-linear partial differential equations, and automata theory (later applied to computers). His work in economics included his 1937 paper “A Model of General Economic Equilibrium” on a multi-sectoral growth model and his 1944 book “Theory of Games and Economic Behavior” (co-authored with Morgenstern) on game theory and uncertainty.

I leave the discussion of von Neumann with a couple of quotations:

“If people do not believe that mathematics is simple, it is only because they do not realize how complicated life is.”

“Anyone who considers arithmetical methods of producing random numbers is, of

course, in a state of sin.”

bare hardware

In the earliest days of electronic digital computing, everything was done on the bare hardware. Very few computers existed and those that did exist were experimental in nature. The researchers who were making the first computers were also the programmers and the users. They worked directly on the “bare hardware”. There was no operating system. The experimenters wrote their programs in machine or assembly language and a running program had complete control of the entire computer. Often programs and data were entered by hand through the use of toggle switches. Memory locations (both data and programs) could be read by viewing a series of lights (one for each binary digit). Debugging consisted of a combination of fixing both the software and hardware, rewriting the object code and changing the actual computer itself.

The lack of any operating system meant that only one person could use a computer at a time. Even in the research lab, there were many researchers competing for limited computing time. The first solution was a reservation system, with researchers signing up for specific time slots. The earliest billing systems charged for the entire computer and all of its resources (regardless of whether used or not) and was based on outside clock time, being billed from the scheduled start to scheduled end times.

The high cost of early computers meant that it was essential that the rare computers be used as efficiently as possible. The reservation system was not particularly efficient. If a researcher finished work early, the computer sat idle until the next time slot. If the researcher's time ran out, the researcher might have to pack up his or her work in an incomplete state at an awkward moment to make room for the next researcher. Even when things were going well, a lot of the time the computer actually sat idle while the researcher studied the results (or studied memory of a crashed program to figure out what went wrong). Simply loading the programs and data took up some of the scheduled time.

computer operators

One solution to this problem was to have programmers prepare their work off-line on some input medium (often on punched cards, paper tape, or magnetic tape) and then hand the work to a computer operator. The computer operator would load up jobs in the order received (with priority overrides based on politics and other factors). Each job still ran one at a time with complete control of the computer, but as soon as a job finished, the operator would transfer the results to some output medium (punched tape, paper tape, magnetic tape, or printed paper) and deliver the results to the appropriate programmer. If the program ran to completion, the result would be some end data. If the program crashed, memory would be transferred to some output medium for the programmer to study (because some of the early business computing systems used magnetic core memory, these became known as “core dumps”).

The concept of computer operators dominated the mainframe era and continues today in large

scale operations with large numbers of servers.

device drivers and library functions

Soon after the first successes with digital computer experiments, computers moved out of the lab and into practical use. The first practical application of these experimental digital computers was the generation of artillery tables for the British and American armies. Much of the early research in computers was paid for by the British and American militaries. Business and scientific applications followed.

As computer use increased, programmers noticed that they were duplicating the same efforts.

Every programmer was writing his or her own routines for I/O, such as reading input from a magnetic tape or writing output to a line printer. It made sense to write a common device driver for each input or putput device and then have every programmer share the same device drivers rather than each programmer writing his or her own. Some programmers resisted the use of common device drivers in the belief that they could write “more efficient” or faster or “better” device drivers of their own.

Additionally each programmer was writing his or her own routines for fairly common and repeated functionality, such as mathematics or string functions. Again, it made sense to share the work instead of everyone repeatedly “reinventing the wheel”. These shared functions would be organized into libraries and could be inserted into programs as needed. In the spirit of cooperation among early researchers, these library functions were published and distributed for free, an early example of the power of the open source approach to software development.

Computer manufacturers started to ship a standard library of device drivers and utility routines with their computers. These libraries were often called a **runtime library** because programs connected up to the routines in the library at run time (while the program was running) rather than being compiled as part of the program. The commercialization of code libraries ended the widespread free sharing of software.

Manufacturers were pressured to add security to their I/O libraries in order to prevent tampering or loss of data.

input output control systems

The first programs directly controlled all of the computer’s resources, including input and output devices. Each individual program had to include code to control and operate each and every input and/or output device used.

One of the first consolidations was placing common input/output (I/O) routines into a common library that could be shared by all programmers. I/O was separated from processing.

These first rudimentary operating systems were called an Input Output Control System or

IOCS.

Computers remained single user devices, with main memory divided into an IOCS and a user section. The user section consisted of program, data, and unused memory.

The user remained responsible for both set up and tear down.

Set up included loading data and program, by front panel switches, punched card, magnetic tapes, paper tapes, disk packs, drum drives, and other early I/O and storage devices. Paper might be loaded into printers, blank cards into card punch machines, and blank or formatted tape into tape drives, or other output devices readied.

Tear down would include unmounting tapes, drives, and other media.

The very expensive early computers sat idle during both set up and tear down.

This waste led to the introduction of less expensive I/O computers. While one I/O computer was being set up or torn down, another I/O computer could be communicating a readied job with the main computer.

Some installations might have several different I/O computers connected to a single main computer to keep the expensive main computer in use. This led to the concept of multiple I/O channels.

monitors

As computers spread from the research labs and military uses into the business world, the accountants wanted to keep more accurate counts of time than mere wall clock time.

This led to the concept of the **monitor**. Routines were added to record the start and end times of work using computer clock time. Routines were added to I/O library to keep track of which devices were used and for how long.

With the development of the Input Output Control System, these time keeping routines were centralized.

You will notice that the word monitor appears in the name of some operating systems, such as FORTRAN Monitor System. Even decades later many programmers still refer to the operating system as the monitor.

An important motivation for the creation of a monitor was more accurate billing. The monitor could keep track of actual use of I/O devices and record runtime rather than clock time.

For accurate time keeping the monitor had to keep track of when a program stopped running, regardless of whether it was a normal end of the program or some kind of abnormal termination (such as a crash).

The monitor reported the end of a program run or error conditions to a computer operator, who could load the next job waiting, rerun a job, or take other actions. The monitor also notified the computer operator of the need to load or unload various I/O devices (such as changing tapes, loading paper into the printer, etc.).

1946

The first modern electronic computer was the ENIAC in 1946, using 18,000 vacuum tubes. See above for information on Von Neumann's important contributions.

Computers: UPenn Eniac (5 kOPS); Colossus 2 (parallel processor, 50 kOPS)

Technology: electrostatic memory

1948

Computers: IBM SSEC; Manchester SSEM

Technology: random access memory; magnetic drums; transistor

Theory: Claude E. Shannon publishes "A Mathematical Theory of Communication", including Shannon's source coding theorem that establishes the limits to possible data compression.

1949

Short Code created in 1949. This programming language was compiled into machine code by hand.

Programming Languages: Short Code

Computers: Manchester Mark 1

Technology: registers

1950s

Some operating systems from the 1950s include: FORTRAN Monitor System, General Motors Operating System, Input Output System, SAGE, and SOS.

SAGE (Semi-Automatic Ground Environment), designed to monitor weapons systems, was the first real time control system.

1951

Grace Hopper starts work on A-0.

Computers: Ferranti Mark 1 (first commercial computer); Leo I (first business computer); UNIVAC I, Whirlwind

1952

Autocode, a symbolic assembler for the Manchester Mark I computer, was created in 1952 by Alick E. Glennie. Later used on other computers.

A-0 (also known as AT-3), the first compiler, was created in 1952 by Grace Murray Hopper. She later created A-2, ARITH-MATIC, MATH-MATIC, and FLOW-MATIC, as well as being one of the leaders in the development of **COBOL**. Grace Hopper was working for Remington Rand at the time. Rand released the language as MATH-MATIC in 1957.

According to some sources, first work started on FORTRAN.

Computers: UNIVAC 1101; IBM 701

Games: OXO (a graphic version of Tic-Tac-Toe created by A.S. Douglas on the EDSAC computer at the University of Cambridge to demonstrate ideas on human-computer interaction)

1953

Computers: Strela

1954

The first solid-state (or transistor) computer was the TRADIC, built at Bell Laboratories in 1954. The transistor had previously been invented at Bell Labs in 1948.

FORTRAN (FORmula TRANslator) was created in 1954 by John Backus and other researchers at International Business Machines (now IBM). Released in 1957. FORTRAN is the oldest programming language still in common use. Identifiers were limited to six characters. Elegant representation of mathematic expressions, as well as relatively easy input and output. FORTRAN was based on A-0.

“Often referred to as a *scientific language*, FORTRAN was the first *high-level* language, using the first compiler ever developed. Prior to the development of FORTRAN computer programmers were required to program in machine/assembly code, which was an extremely difficult and time consuming task, not to mention the dreadful chore of debugging the code. The objective during its design was to create a programming language that would be: simple to learn, suitable for a wide variety of applications, *machine independent*, and would allow complex mathematical expressions to be stated similarly to regular algebraic notation. While still being almost as efficient in execution as assembly language. Since FORTRAN was so much easier to code, programmers were able to write programs 500% faster than before, while execution efficiency was only reduced by 20%, this allowed them to focus more on the problem solving aspects of a problem, and less on coding.

“FORTRAN was so innovative not only because it was the first high-level language [still in use], but also because of its compiler, which is credited as giving rise to the branch of computer science now known as *compiler theory*. Several years after its release FORTRAN had developed many different *dialects*, (due to special *tweaking* by programmers trying to make it better suit their personal needs) making it very difficult to transfer programs from one machine to another.” —Neal Ziring, The Language Guide, University of Michigan

“Some of the more significant features of the language are listed below:” —Neal Ziring, The Language Guide, University of Michigan

- **Simple to learn** - when FORTRAN was design one of the objectives was to write a language that was easy to learn and understand.
- **Machine Independent** - allows for easy transportation of a program from one machine to another.
- **More natural ways to express mathematical functions** - FORTRAN permits even severely complex mathematical functions to be expressed similarly to regular algebraic notation.
- **Problem orientated language**
- **Remains close to and exploits the available hardware**
- **Efficient execution** - there is only an approximate 20% decrease in efficiency as compared to assembly/machine code.
- **Ability to control storage allocation** -programmers were able to easily control the allocation of storage (although this is considered to be a dangerous practice today, it was quite important some time ago due to limited memory.
- **More freedom in code layout** - unlike assembly/machine language, code does not need to be laid out in rigidly defined columns, (though it still must remain within the parameters of the FORTRAN source code form).

“42. You can measure a programmer’s perspective by noting his attitude on the continuing vitality of FORTRAN.” —Alan Perlis, [Epigrams on Programming](#), ACM’s SIGPLAN Notices Volume 17, No. 9, September 1982, pages 7-13

Programming Languages: FORTRAN

Computers: IBM 650; IBM 704 (vacuum tube computer with floating point); IBM NORC (67 kOPS)

Technology: magnetic core memory

1955

Operating Systems: GMOS (General Motors OS for IBM 701)

Computers: Harwell CADET

batch systems

Batch systems automated the early approach of having human operators load one program at a time. Instead of having a human operator load each program, software handled the scheduling of jobs. In addition to programmers submitting their jobs, end users could submit requests to run specific programs with specific data sets (usually stored in files or on cards). The operating system would schedule “batches” of related jobs. Output (punched cards, magnetic tapes, printed material, etc.) would be returned to each user.

General Motors Operating System, created by General Motors Research Laboratories in early 1956 (or late 1955) for their IBM 701 mainframe is generally considered to be the first batch operating system and possibly the first “real” operating system.

The operating system would read in a program and its data, run that program to completion (including outputting data), and then load the next program in series as long as there were additional jobs available.

Batch operating systems used a Job Control Language (JCL) to give the operating system instructions. These instructions included designation of which punched cards were data and which were programs, indications of which compiler to use, which centralized utilities were to be run, which I/O devices might be used, estimates of expected run time, and other details.

This type of batch operating system was known as a single stream batch processing system.

Examples of operating systems that were primarily batch-oriented include: BKY, BOS/360, BPS/360, CAL, and Chios.

1956

Researchers at MIT begin experimenting with direct keyboard input into computers.

IPL (Information Processing Language) was created in 1956 by A. Newell, H. Simon, and J.C. Shaw. IPL was a low level list processing language which implemented recursive programming.

Operating Systems: GM-NAA I/O

Programming Languages: IPL

Computers: IBM 305 RAMAC; MIT TX-0 (83 kOPS)

Technology: hard disk

1957

MATH-MATIC was released by the Rand Corporation in 1957. The language was derived from Grace Murray Hopper’s A-0.

FLOW-MATIC, also called B-0, was created in 1957 by Grace Murray Hopper.

The first commercial FORTRAN program was run at Westinghouse. The first compile run produced a missing comma diagnostic. The second attempt was a success.

BESYS OS created by Bell telephone Laboratories for internal use.

The U.S. government created the Advanced Research Project Group (ARPA) in response to the Soviet Union's launching of Sputnik. ARPA was intended to develop key technology that was too risky for private business to develop.

Operating Systems: BESYS OS

Programming Languages: FLOW-MATIC; MATH-MATIC

Computers: IBM 608

Technology: dot matrix printer

1958

FORTRAN II in 1958 introduces subroutines, functions, loops, and a primitive For loop.

IAL (International Algebraic Logic) started as the project later renamed **ALGOL 58**. The theoretical definition of the language is published. No compiler.

LISP (LISt Processing) was created in 1958 and released in 1960 by John McCarthy of MIT. LISP is the second oldest programming language still in common use. LISP was intended for writing artificial intelligence programs.

“Interest in artificial intelligence first surfaced in the mid 1950s. Linguistics, psychology, and mathematics were only some areas of application for AI. Linguists were concerned with natural language processing, while psychologists were interested in modeling human information and retrieval. Mathematicians were more interested in automating the theorem proving process. The common need among all of these applications was a method to allow computers to process symbolic data in lists.

“IBM was one of the first companies interested in AI in the 1950s. At the same time, the **FORTRAN** project was still going on. Because of the high cost associated with producing the first FORTRAN compiler, they decided to include the list processing functionality into FORTRAN. The FORTRAN List Processing Language (FLPL) was designed and implemented as an extension to FORTRAN.

“In 1958 John McCarthy took a summer position at the IBM Information Research Department. He was hired to create a set of requirements for doing symbolic computation. The first attempt at this was differentiation of algebraic expressions. This initial experiment produced a list of language requirements, most notably was recursion and conditional expressions. At the time, not even FORTRAN (the only high-level language in existence) had these functions.

“It was at the 1956 Dartmouth Summer Research Project on Artificial Intelligence that John McCarthy first developed the basics behind Lisp. His motivation was to develop a list processing language for Artificial Intelligence. By 1965 the primary dialect of Lisp was created (version 1.5). By 1970 special-purpose computers known as Lisp Machines, were designed to run Lisp programs. 1980 was the year that object-oriented concepts were integrated into the language. By 1986, the X3J13 group formed to produce a draft for ANSI Common Lisp standard. Finally in 1992, X3J13 group published the American National Standard for Common Lisp.” —Neal Ziring, The Language Guide, University of Michigan

“Some of the more significant features of the language are listed below:” —Neal Ziring, The Language Guide, University of Michigan

- **Atoms & Lists** - Lisp uses two different types of data structures, atoms and lists.
- **Atoms** are similar to identifiers, but can also be numeric constants
- **Lists** can be lists of atoms, lists, or any combination of the two
- **Functional Programming Style** - all computation is performed by applying functions to arguments. Variable declarations are rarely used.
- **Uniform Representation of Data and Code** - example: the list (A B C D)
 - a list of four elements (interpreted as data)
 - is the application of the function named A to the three parameters B, C, and D (interpreted as code)
- **Reliance on Recursion** - a strong reliance on recursion has allowed Lisp to be successful in many areas, including Artificial Intelligence.
- **Garbage Collection** - Lisp has built-in garbage collection, so programmers do not need to explicitly free dynamically allocated memory.

“55. A LISP programmer knows the value of everything, but the cost of nothing.” —Alan Perlis, [Epigrams on Programming](#), ACM's SIGPLAN Notices Volume 17, No. 9, September 1982, pages 7-13

Operating Systems: UMES

Programming Languages: FORTRAN II; IAL; LISP

Computers: UNIVAC II; IBM AN/FSQ-7 (400 kOPS)

Games: Tennis For Two (developed by William Higinnotham using an oscilloscope and an analog computer)

Technology: integrated circuit

1959

COBOL (COmmon Business Oriented Language) was created in May 1959 by the Short Range Committee of the U.S. Department of Defense (DoD). The CODASYL committee (COncference on DAta SYstems Languages) worked from May 1959 to April 1960. Official

ANSI standards included COBOL-68 (1968), COBOL-74 (1974), COBOL-85 (1985), and COBOL-2002 (2002). COBOL 97 (1997) introduced an object oriented version of COBOL. COBOL programs are divided into four divisions: identification, environment, data, and procedure. The divisions are further divided into sections. Introduced the RECORD data structure. Emphasized a verbose style intended to make it easy for business managers to read programs. Admiral Grace Hopper is recognized as the major contributor to the original COBOL language and as the inventor of compilers.

LISP 1.5 released in 1959.

“ ‘**DYNAMO** is a computer program for translating mathematical models from an easy-to-understand notation into tabulated and plotted results. ... A model written in DYNAMO consists of a number of algebraic relationships that relate the variables one to another.’ Although similar to **FORTRAN**, it is easier to learn and understand. DYNAMO stands for DYNAmic MOdels. It was written by Dr. Phyllis Fox and Alexander L. Pugh, III, and was completed in 1959. It grew out of an earlier language called SIMPLE (for Simulation of Industrial Management Problems with Lots of Equations), written in 1958 by Richard K. Bennett.” —Language Finger, [Maureen and Mike Mansfield Library](#), University of Montana.

ERMA (Electronic Recording Method of Accounting), a magnetic ink and computer readable font, was created for the Bank of America.

Operating Systems: SHARE

Programming Languages: COBOL; DYNAMO, ERMA; LISP 1.5

Computers: IBM 1401

early 1960s

The early 1960s saw the introduction of time sharing and multi-processing.

Some operating systems from the early 1960s include: Admiral, B1, B2, B3, B4, Basic Executive System, BOS/360, Compatible Timesharing System (CTSS), EXEC I, EXEC II, Honeywell Executive System, IBM 1410/1710 OS, IBSYS, Input Output Control System, Master Control Program, and SABRE.

The first major transaction processing system was SABRE (Semi-Automatic Business Related Environment), developed by IBM and American Airlines.

multiprogramming

There is a huge difference in speed between I/O and running programs. In a single stream system, the processor remains idle for much of the time as it waits for the I/O device to be ready to send or receive the next piece of data.

The obvious solution was to load up multiple programs and their data and switch back and forth between programs or jobs.

When one job dled to wait for input or output, the operating system could automatically switch to another job that was ready.

system calls

The first operating system to introduce system calls was University of Machester's Atlas I Supervisor.

time sharing

The operating system could have additional reasons to rotate through jobs, including giving higher or lower priority to

various jobs (and therefore a larger or smaller share of time and other resources). The Compatible Timesharing System (CTSS), first dmonstrated in 1961, was one of the first attempts at timesharing.

While most of the CTSS operating system was written in assembly language (all previous OSes were written in assembly for efficiency), the scheduler was written in the programming language MAD in order to allow safe and reliable experimentation with different scheduling algorithms. About half of the command programs for CTSS were also written in MAD.

Timesharing is a more advanced version of multiprogramming that gives many users the illusion that they each have complete control of the computer to themselves. The scheduler stops running programs based on a slice of time, moves on to the next program, and eventually returns back to the beginning of the list of programs. In little increments, each program gets their work done in a manner that appears to be simultaneous to the end users.

mid 1960s

Some operating systems from the mid-1960s include: Atlas I Supervisor, DOS/360, Input Output Selector, Master Control Program, and Multics.

The Atlas I Supervisor introduced spooling, interrupts, and virtual memory paging (16 pages) in 1962. Segmentation was introduced on the Burroughs B5000. MIT's Multics combined paging and segmentation.

The Compatible Timesharing System (CTSS) introduced email.

late 1960s

Some operating systems from the late-1960s include: BPS/360, CAL, CHIPPEWA, EXEC 3,

EXEC 4, EXEC 8, GECOS III, George 1, George 2, George 3, George 4, IDASYS, MASTER, Master Control Program, OS/MFT, OS/MFT-II, OS/MVT, OS/PCP, and RCA DOS.

1960

ALGOL (ALGOrithmic Language) was released in 1960. Major releases in 1960 (ALGOL 60) and 1968 (ALGOL 68). ALGOL is the first block-structured language and is considered to be the first second generation computer language. This was the first programming language that was designed to be machine independent. ALGOL introduced such concepts as: block structure of code (marked by BEGIN and END), scope of variables (local variables inside blocks), BNF (Backus Naur Form) notation for defining syntax, dynamic arrays, reserved words, IF THEN ELSE, FOR, WHILE loop, the := symbol for assignment, SWITCH with GOTOs, and user defined data types. ALGOL became the most popular programming language in Europe in the mid- and late-1960s.

C.A.R. Hoare invents the **Quicksort** in 1960.

Programming Languages: ALGOL

Operating Systems: IBSYS

Computers: DEC PDP-1; CDC 1604; UNIVAC LARC (250 kFLOPS)

1961

The Compatible Timesharing System (CTSS), first demonstrated in 1961, was one of the first attempts at timesharing.

While most of the CTSS operating system was written in assembly language (all previous OSes were written in assembly for efficiency), the scheduler was written in the programming language MAD in order to allow safe and reliable experimentation with different scheduling algorithms. About half of the command programs for CTSS were also written in MAD.

Operating Systems: CTSS, Burroughs MCP

Computers: IBM 7030 Stretch (1.2 MFLOPS)

1962

APL (A Programming Language) was published in the 1962 book *A Programming Language* by Kenneth E. Iverson and a subset was first released in 1964. The language APL was based on a notation that Iverson invented at Harvard University in 1957. APL was intended for mathematical work and used its own special character set. Particularly good at matrix manipulation. In 1957 it introduced the array. APL used a special character set and required special keyboards, displays, and printers (or printer heads).

FORTRAN IV is released in 1962.

Simula was created by Ole-Johan Dahl and Kristen Nygaard of the Norwegian Computing Center between 1962 and 1965. A compiler became available in 1964. Simula I and Simula 67 (1967) were the first object-oriented programming languages.

SNOBOL (StroNg Oriented symBoli Language) was created in 1962 by D.J. Farber, R.E. Griswold, and F.P. Polensky at Bell Telephone Laboratories. Intended for processing strings, the language was the first to use associative arrays, indexed by any type of key. Had features for pattern-matching, concatenation, and alternation. Allowed running code stored in strings. Data types: integer, real, array, table, pattern, and user defined types.

SpaceWarI, the first interactive computer game, was created by MIT students Slug Russel, Shag Graetz, and Alan Kotok on DEC's PDP-1.

The first operating system to introduce system calls was University of Machester's Atlas I Supervisor.

The Atlas I Supervisor introduced spooling, interrupts, and virtual memory paging (16 pages) in 1962. Segmentation was introduced on the Burroughs B5000. MIT's Multics combined paging and segmentation.

Operating Systems: GECOS

Programming Languages: APL; FORTRAN IV; Simula; SNOBOL

Games: Spacewar! (created by group of M.I.T. students on the DEC PDP-1)

Computers: ATLAS, UNIVAC 1100/2200 (introduced two floating point formats, single precision and double precision; single precision: 36 bits, 1-bit sign, 8-bit exponent, and 27-bit significand; double precision: 36 bits, 1-bit sign, 11-bit exponent, and 60-bit significand), IBM 7094 (followed the UNIVAC, also had single and double precision numbers)

Technology: RAND Corporation proposes the internet

1963

Work on PL/I starts in 1963.

“**Data-Text** was the “original and most general problem-oriented computer language for social scientists.” It has the ability to handle very complicated data processing problems and extremely intricate statistical analyses. It arose when **FORTRAN** proved inadequate for such uses. Designed by Couch and others, it was first used in 1963/64, then extensively revised in 1971. The Data-Text System was originally programmed in FAP, later in FORTRAN, and finally its own language was developed.” —Language Finger, [Maureen and Mike Mansfield Library](#), University of Montana.

Sketchpad, an interactive real time computer drawing system, was created in 1963 by Ivan Sutherland as his doctoral thesis at MIT. The system used a light pen to draw and manipulate geometric figures on a computer screen.

ASCII (American Standard Code for Information Interchange) was introduced in 1963.

Programming Languages: Data-Text

Computers: DEC PDP-6

Software: Sketchpad

Technology: mouse

1964

BASIC (Beginner's All-purpose Symbolic Instruction Code) was designed as a teaching language in 1963 by John George Kemeny and Thomas Eugene Kurtz of Dartmouth College. BASIC was intended to make it easy to learn programming. The first BASIC program was run at 4 a.m. May 1, 1964.

PL/I (Programming Language One) was created in 1964 at IBM's Hursley Laboratories in the United Kingdom. PL/I was intended to combine the scientific abilities of **FORTRAN** with the business capabilities of **COBOL**, plus additional facilities for systems programming. It also borrows from **ALGOL 60** and **SNOBOL** (with more modern implementations of string processing, such as **SUBSTR**). Originally called **NPL**, or New Programming Language. Introduces storage classes (automatic, static, controlled, and based), exception processing (On conditions), Select When Otherwise conditional structure, and several variations of the **DO** loop. Numerous data types, including control over precision.

RPG (Report Program Generator) was created in 1964 by IBM. Intended for creating commercial and business reports.

APL\360 implemented in 1964.

Bell Telephone Laboratories determines that it needs a new operating system to replace its 1957 **BESYS** OS. This project becomes **Multics**.

Operating Systems: DTSS, TOPS-10

Programming Languages: APL\360; BASIC; PL/I; RPG

Computers: IBM 360; DEC PDP-8; CDC 6600 (first supercomputer, scalar processor, 3 MFLOPS)

Technology: super computing

1965

Multics The Massachusetts Institute of Technology (MIT), AT&T Bell Labs, and General Electric attempted to create an experimental operating system called **Multics** for the GE-645 mainframe computer. AT&T intended to offer subscription- based computing services over the phone lines, an idea similar to the modern cloud approach to computing.

While the **Multics** project had many innovations that went on to become standard approaches

for operating systems, the project was too complex for the time.

SNOBOL 3 was released in 1965.

Attribute grammars were created in 1965 by Donald Knuth.

Operating Systems: OS/360; Multics

Programming Languages: SNOBOL 3

Technology: time-sharing; fuzzy logic; packet switching; bulletin board system (BBS); email

1966

ALGOL W was created in 1966 by Niklaus Wirth. ALGOL W included RECORDs, dynamic data structures, CASE, passing parameters by value, and precedence of operators.

Euler was created in 1966 by Niklaus Wirth.

FORTRAN 66 was released in 1966. The language was rarely used.

ISWIM (If You See What I Mean) was described in 1966 in Peter J. Landin's article *The Next 700 Programming Languages* in the Communications of the ACM. ISWIM, the first purely functional language, influenced functional programming languages. The first language to use lazy evaluation.

LISP 2 was released in 1966.

Programming Languages: ALGOL W; Euler; FORTRAN 66; ISWIM

Computers: BESM-6

1967

Simula 67 was created by Ole-Johan Dahl and Kristen Nygaard of the Norwegian Computing Center in 1967. Introduced classes, methods, inheritance, and objects that are instances of classes.

SNOBOL 4 (StroNg Oriented symBoli Language) was released in 1967

ALGOL 60 and functional language. Used polymorphic testing structures. Included the ANY type, lists, and arrays.

Operating Systems: ITS; CP/CMS; WAITS

Programming Languages: CPL; Logo; Simula 67; SNOBOL 4

1968

In 1968 a group of scientists and engineers from Mitre Corporation (Bedford, Massachusetts)

created Viatron Computer company and an intelligent data terminal using an 8-bit LSI microprocessor from PMOS technology.

ALGOL 68 in 1968 introduced the `=+` token to combine assignment and add, **UNION**, and **CASTing** of types. It included the **IF THEN ELIF FI** structure, **CASE** structure, and user-defined operators.

Forth was created by Charles H. Moore in 1968. Stack based language. The name “Forth” was a reference to Moore’s claim that he had created a fourth generation programming language.

ALTRAN, a variant of **FORTRAN**, was released.

ANSI version of COBOL defined.

Edsger Dijkstra wrote a letter to the Communications of the ACM claiming that the use of **GOTO** was harmful.

Programming Languages: ALTRAN; ALGOL 68; Forth

Computers: DEC PDP-10

Technology: microprocessor; interactive computing (including mouse, windows, hypertext, and fullscreen word processing)

microprocessors

In 1968 a group of scientists and engineers from Mitre Corporation (Bedford, Massachusetts) created Viatron Computer company and an intelligent data terminal using an 8-bit LSI microprocessor from PMOS technology. A year later in 1969 Viatron created the 2140, the first 4-bit LSI microprocessor. At the time MOS was used only for a small number of calculators and there simply wasn’t enough worldwide manufacturing capacity to build these computers in quantity.

Other companies saw the benefit of MOS, starting with Intel’s 1971 release of the 4-bit 4004 as the first commercially available microprocessor. In 1972 Rockwell released the PPS-4 microprocessor, Fairchild released the PPS-25 microprocessor, and Intel released the 8-bit 8008 microprocessor. In 1973 National released the IMP microprocessor.

In 1973 Intel released the faster NMOS 8080 8-bit microprocessor, the first in a long series of microprocessors that led to the current Pentium.

In 1974 Motorola released the 6800, which included two accumulators, index registers, and memory-mapped I/O. Monolithic Memories introduced bit-slice microprocessing. In 1975 Texas Instruments introduced a 4-bit slice microprocessor and Fairchild introduced the F-8 microprocessor.

1969

In 1969 Viatron created the 2140, the first 4-bit LSI microprocessor. At the time MOS was used only for a small number of calculators and there simply wasn't enough worldwide manufacturing capacity to build these computers in quantity.

UNIX was created at AT&T Bell Telephone Laboratories (now an independent corporation known as Lucent Technologies) by a group that included Ken Thompson, Dennis Ritchie, Brian Kernighan, Douglas McIlroy, Michael Lesk and Joe Ossanna.

This group of researchers, the last of the AT&T employees involved in Multics, decided to attempt the goals of Multics on a much more simple scale.

Unix was originally called UNICS, for Uniplexed Information and Computing Service, a play on words variation of Multics, Multiplexed Information and Computing Service (*uni-* means “one”, *multi-* means “many”).

“What we wanted to preserve was not just a good environment in which to do programming, but a system around which a fellowship could form. We knew from experience that the essence of communal computing, as supplied by remote- access, time-shared machines, is not just to type programs into a terminal instead of a keypunch, but to encourage close communication,” according to Dennis Ritchie.

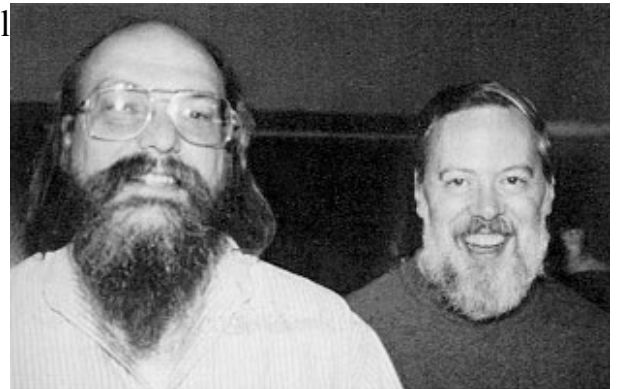
UNIX was originally intended as a programmer's workbench. The original version was a single-user system. As UNIX spread through the academic community, more general purpose tools were added, turning UNIX into a general purpose operating system.

While Ken Thompson still had access to the Multics environment, he wrote simulations on Multics for UNIX's file and paging system.

Ken Thompson and Dennis Ritchie led a team of Bell Labs researchers (the team included Rudd Canaday) working on the PDP-7 to develop a hierarchical file system, computer processes, device files, a command-line interpreter, and a few small utility programs.

This version of UNIX was written in the B language.

At the time, AT&T was prohibited from selling computers or software, but was allowed to develop its own software and computers for internal use. AT&T's consent decree with the U.S. Justice Department on monopoly charges was interpreted as allowing AT&T to release UNIX as an open source operating system for academic use. Ken Thompson, one of the originators of UNIX, took UNIX to the University of California, Berkeley, where students quickly started making improvements and modifications, leading to the world famous Berkeley Software Distribution (BSD) form of UNIX.



UNIX quickly spread throughout the academic world, as it solved the problem of keeping track of many (sometimes dozens) of proprietary operating systems on university computers. With UNIX all of the computers from many different manufacturers could run the same operating system and share the same programs (recompiled on each processor).

BCP (Basic CPL) was created in 1969 in England. Intended as a simplified version of CPL, includes the control structures For, Loop, If Then, While, Until Repeat, Repeat While, and Switch Case.

“BCPL was an early computer language. It provided for comments between slashes. The name is condensed from “Basic CPL”; CPL was jointly designed by the Universities of Cambridge and London. Officially, the “C” stood first for “Cambridge,” then later for “Combined.” -- Unofficially it was generally accepted as standing for Christopher Strachey, who was the main impetus behind the language.”
—Language Finger, [Maureen and Mike Mansfield Library](#), University of Montana.

B (derived from BCPL) developed in 1969 by Ken Thompson of Bell Telephone Laboratories for use in systems programming for UNIX. This was the parent language of C.

SmallTalk was created in 1969 at Xerox PARC by a team led by Alan Kay, Adele Goldberg, Ted Kaehler, and Scott Wallace. Fully object oriented programming language that introduces a graphic environment with windows and a mouse.

RS-232-C standard for serial communication introduced in 1969.

Space Travel Ken Thompson ported the Space Travel computer game from Multics to a Digital Equipment Corporation (DEC) PDP-7 he found at Bell Labs.

ARPA creates **ARPAnet**, the forerunner of the Internet (originally hosted by UCLA, UC Santa Barbara, University of Utah, and Stanford Research Institute).

Operating Systems: ACP; TENEX/TOPS-20; work started on Unix (initially called UNICS)

Programming Languages: B, BCPL; SmallTalk

Computers: CDC 7600 (36 MFLOPS)

Games: Space Travel (written by Jeremy Ben for Multics; when AT&T pulled out of the Multics project, J. Ben ported the program to **FORTTRAN** running on GECOS on the GE 635; then ported by J. Ben and Dennis Ritchie in PDP-7 assembly language; the process of porting the game to the PDP-7 computer was the beginning of Unix)

Technology: ARPANET (military/academic precursor to the Internet); RS-232; networking; laser printer (invented by Gary Starkweather at Xerox)

early 1970s

Some operating systems from the early-1970s include: BKY, Chios, DOS/VS, Master Control Program, OS/VS1, and UNIX.

In 1970 Ken Thompson of AT&T Bell Labs suggested the name “Unix” for the operating system that had been under development since 1969. The name was an intentional pun on AT&T’s earlier Multics project (*uni-* means “one”, *multi-* means “many”).

UNIX takes over mainframes

I am skipping ahead to the development and spread of UNIX, not because the early history isn’t interesting, but because I notice that a lot of people are searching for information on UNIX history.

UNIX was originally developed in a laboratory at AT&T’s Bell Labs (now an independent corporation known as Lucent Technologies). At the time, AT&T was prohibited from selling computers or software, but was allowed to develop its own software and computers for internal use. A few newly hired engineers were unable to get valuable mainframe computer time because of lack of seniority and resorted to writing their own operating system (UNIX) and programming language (C) to run on an unused mini-computer .

The computer game Space Travel was originally written by Jeremy Ben for Multics. When AT&T pulled out of the Multics project, J. Ben ported the program to FORTRAN running on GECOS on the GE 635. J. Ben and Dennis Ritchie ported the game in DEC PDP-7 assembly language. The process of porting the game to the PDP-7 computer was the beginning of Unix.

Unix was originally called UNICS, for Uniplexed Information and Computing Service, a play on words variation of Multics, Multiplexed Information and Computing Service.

In 1973 the kernel of Unix was rewritten in the C programming language. This made Unix the world’s first portable operating system, capable of being easily ported (moved) to any hardware. This was a major advantage for Unix and led to its widespread use in the multi-platform environments of colleges and universities.

AT&T’s consent decree with the U.S. Justice Department on monopoly charges was interpreted as allowing AT&T to release UNIX as an open source operating system for academic use. Ken Thompson, one of the originators of UNIX, took UNIX to the University of California, Berkeley, where students quickly started making improvements and modifications, leading to the world famous Berkeley Standard Distribution (BSD) form of UNIX.

UNIX quickly spread throughout the academic world, as it solved the problem of keeping track of many (sometimes dozens) of proprietary operating systems on university computers. With UNIX all of the computers from many different manufacturers could run the same operating system and share the same programs (recompiled on each processor).

When AT&T settled yet another monopoly case, the company was broken up into “Baby Bells” (the regional companies operating local phone service) and the central company (which had the long distance business and Bell Labs). AT&T (as well as the Baby Bells) was allowed to

enter the computer business. AT&T gave academia a specific deadline to stop using “encumbered code” (that is, any of AT&T’s source code anywhere in their versions of UNIX).

This led to the development of free open source projects such as FreeBSD, NetBSD, and OpenBSD, as well as commercial operating systems based on the BSD code.

Meanwhile, AT& developed its own version of UNIX, called System V. Although AT&T eventually sold off UNIX, this also spawned a group of commercial operating systems known as Sys V UNIXes.

UNIX quickly swept through the commercial world, pushing aside almost all proprietary mainframe operating systems. Almost only IBM’s MVS and DEC’s OpenVMS survived the UNIX onslaught.

“Vendors such as Sun, IBM, DEC, SCO, and HP modified Unix to differentiate their products. This splintered Unix to a degree, though not quite as much as is usually perceived. Necessity being the mother of invention, programmers have created development tools that help them work around the differences between Unix flavors. As a result, there is a large body of software based on source code that will automatically configure itself to compile on most Unix platforms, including Intel-based Unix.

Regardless, Microsoft would leverage the perception that Unix is splintered beyond hope, and present Windows NT as a more consistent multi-platform alternative.” — Nicholas Petreley, “The new Unix alters NT’s orbit”, NC World

UNIX to the desktop

Among the early commercial attempts to deploy UNIX on desktop computers was AT&T selling UNIX in an Olivetti box running 680x0 assembly language. Microsoft partnered with Xenix to sell their own version of UNIX. Apple computers offered their A/UX version of UNIX running on Macintoshes. None of these early commercial UNIXs were successful. “Unix started out too big and unfriendly for the PC. ... It sold like ice cubes in the Arctic. ... Wintel emerged as the only ‘safe’ business choice”, Nicholas Petreley.

“Unix had a limited PC market, almost entirely server-centric. SCO made money on Unix, some of it even from Microsoft. (Microsoft owns 11 percent of SCO, but Microsoft got the better deal in the long run, as it collected money on each unit of SCO Unix sold, due to a bit of code in SCO Unix that made SCO somewhat compatible with Xenix. The arrangement ended in 1997.)” —Nicholas Petreley, “The new Unix alters NT’s orbit”, NC World

To date, the most widely used desktop version of UNIX is Apple’s Mac OS X, combining the ground breaking object oriented NeXT with some of the user interface of the Macintosh.

mid 1970s

Some operating systems from the mid-1970s include: CP/M, Master Control Program.

late 1970s

Some operating systems from the late-1970s include: EMAS 2900, General Comprehensive OS, VMS (later renamed OpenVMS), OS/MVS.

1970

Prolog (PROgramming LOGic) was created in 1972 in France by Alan Colmerauer with Philippe Roussel. Introduces Logic Programming.

Pascal (named for French religious fanatic and mathematician Blaise Pascal) was created in 1970 by Niklaus Wirth on a CDC 6000-series computer. Work started in 1968. Pascal was intended as a teaching language to replace BASIC, but quickly developed into a general purpose programming language. Programs compiled to a platform-independent intermediate P-code. The compiler for pascal was written in Pascal, an influential first in language design.

Forth used to write the program to control the Kitt Peaks telescope.<

BLISS was a systems programming language developed by W.A. Wulf, D.B. Russell, and A.N. Habermann at Carnegie Mellon University in 1970. BLISS was a very popular systems programming language until the rise of C. The original compiler was noted for its optimizing of code. Most of the utilities for DEC's VMS operating system were written in BLISS-32. BLISS was a typeless language based on expressions rather than statements. Expressions produced values, and possibly caused other actions, such as modification of storage, transfer of control, or looping. BLISS had powerful macro facilities, conditional execution of statements, subroutines, built-in string functions, arrays, and some automatic data conversions. BLISS lacked I/O instructions on the assumption that systems I/O would actually be built in the language.

UNIX In 1970 Dennis Ritchie and Ken Thompson traded the promise to add text processing capabilities to UNIX for the use of a Digital Equipment Corporation (DEC) PDP-11/20. The initial version of UNIX, a text editor, and a text formatting program called `roff` were all written in PDP-11/20 assembly language.

In 1970 Ken Thompson of AT&T Bell Labs suggested the name "UNICS" for the operating system that had been under development since 1969. The name was an intentional pun on AT&T's earlier Multics project (*uni-* means "one", *multi-* means "many").

UNIX was renamed from the original name UNICS. The author of the name change is lost to history.

ROFF Soon afterwards `roff` evolved into `troff` with full typesetting capability. The *UNIX*

Programmer's Manual was published on November 3, 1971. The first commercial UNIX system was installed in early 1972 at the New York Telephone Co. Systems Development Center under the direction of Dan Gielan. Neil Groundwater build an Operational Support System in PDP-11/20 assembly language.

Quantum Computing Stephen Wiesner invents conjugate coding.

Operating Systems: Unix; RT-11; RSTS-11

Programming Languages: BLISS; Pascal; Prolog

Computers: Datapoint 2200; DEC PDP-11

Software: ROFF

Technology: dynamic RAM; flight data processor

1971

Manufacturers saw the benefit of MOS, starting with Intel's 1971 release of the 4-bit 4004 as the first commercially available microprocessor.

UNIX shell This first UNIX command shell, called the Thompson shell and abbreviated `sh`, was written by Ken Thompson at AT&T's Bell Labs, was much more simple than the famous UNIX shells that came along later. The Thompson shell was distributed with Versions 1 through 6 of UNIX, from 1971 to 1975.

The first UNIX book, *UNIX Programmer's Manual*, by Ken Thompson and Dennis Ritchie, was published in 1971 and included 60 commands.

Computers: Intel 4004 (four-bit microprocessor)

Software: UNIX shell

Games: Computer Space (first commercial vidoe game)

Technology: floppy disk; first electronic calculator (TI)

1972

In 1972 Rockwell released the PPS-4 microprocessor, Fairchild released the PPS-25 microprocessor, and Intel released the 8-bit 8008 microprocessor. All used PMOS.

C was developed from 1969-1972 by Dennis Ritchie and Ken Thompson of Bell Telephone Laboratories for use in systems programming for UNIX. C was based on the earlier programming language B.

UNIX In 1972 work started on converting UNIX to **C** The UNIX kernel was originally written in assembly language, but by 1973 it had been almost completely converted to the **C language**. At the time it was common belief that operating systems must be written in assembly in order to perform at reasonable speeds. This made Unix the world's first portable operating system, capable of being easily ported (moved) to any hardware. This was a major advantage for

Unix and led to its widespread use in the multi-platform environments of colleges and universities. Writing UNIX in **C** allowed for easy portability to new hardware, which in turn led to the UNIX operating system being used on a wide variety of computers.

In 1972, the pipe concept was invented.

Pong, the first arcade video game, was introduced by Nolan Bushnell in 1972. His company was called Atari.

Operating Systems: VM/CMS; UNIX rewritten in C

Programming Languages: C

Computers: Intel 8008 (microprocessor); Rockwell PPS-4 (microprocessor); Fairchild PPS-25 (microprocessor)

Games: Pong; Magnavox Odyssey (first home video game console)

Technology: game console (Magnavox Odyssey); first scientific calculator (HP); first 32-bit minicomputer; first arcade video game

1973

In 1973 National released the IMP microprocessor using PMOS.

In 1973 Intel released the faster NMOS 8080 8-bit microprocessor, the first in a long series of microprocessors that led to the current Pentium.

Quantum Computing Alexander Holevo publishes a paper showing that n qubits cannot carry more than n classical bits of information (known as “Holevo’s theorem”).

Charles H. Bennett shows that computation can be done reversibly.

ML (Meta Language) was created in 1973 by R. Milner of the University of Edinburgh. Functional language implemented in **LISP**.

Actor is a mathematical model for concurrent computation first published by Hewitt in 1973.

“Actor is an object-oriented programming language. It was developed by the Whitewater Group in Evanston, Ill.” —Language Finger, [Maureen and Mike Mansfield Library](#), University of Montana.

UNIX The UNIX kernel was rewritten in the **C** programming language.

In 1973, UNIX was used at 16 sites worldwide.

ARPA creates Transmission Control Protocol/Internet Protocol (TCP/IP) to network together computers for ARPAnet.

Programming Languages: ML

Computers: National IMP (microprocessor)

Software: Actor

Technology: TCP/IP; ethernet

1974

In 1974 Motorola released the 6800, which included two accumulators, index registers, and memory-mapped I/O. Monolithic Memories introduced bit-slice microprocessing.

SQ (Standard Query Language) was designed by Donald D. Chamberlin and Raymond F. Boyce of IBM in 1974.

AWK (first letters of the three inventors) was designed by Aho, Weinberger, and Kerninghan in 1974. Word processing language based on regular expressions.

Alphard (named for the brightest star in Hydra) was designed by William Wulf, Mary Shaw, and Ralph London of Carnegie-Mellon University in 1974. A Pascal-like language intended for data abstraction and verification. Make use of the “form”, which combined a specification and an implementation, to give the programmer control over the implementation of abstract data types.

“Alphard is a computer language designed to support the abstraction and verification techniques required by modern programming methodology. Alphard’s constructs allow a programmer to isolate an abstraction, specifying its behavior publicly while localizing knowledge about its implementation. It originated from studies at both Carnegie-Mellon University and the Information Sciences Institute.” — Language Finger, [Maureen and Mike Mansfield Library](#), University of Montana.

“CLU began to be developed in 1974; a second version was designed in 1977. It consists of a group of modules. One of the primary goals in its development was to provide clusters which permit user-defined types to be treated similarly to built-in types.” —Language Finger, [Maureen and Mike Mansfield Library](#), University of Montana.

BSD Work on UNIX at University of California, Berkeley, the initial version of BSD UNIX.

Operating Systems: MVS, BSD UNIX

Programming Languages: Alphard; AWK; CLU; SQL

Computers: Intel 8080 (microprocessor); Motorola 6800 (microprocessor); CDC STAR-100 (100 MFLOPS)

Technology: Telenet (first commercial version of ARPANET)

1975

In 1975 Texas Instruments introduced a 4-bit slice microprocessor and Fairchild introduced the F-8 microprocessor.

Scheme LISP, was created by Guy Lewis Steele Jr. and Gerald Jay Sussman at MIT in 1975.

Tiny BASIC created by Dr. Wong in 1975 runs on Intel 8080 and Zilog Z80 computers.

RATFOR (RATional FORtran) created by Brian Kernigan in 1975. Used as a precompiler for **FORTRAN**. RATFOR allows C-like control structures in FORTRAN.

TENEX shell (also known as the TOPS shell) was created by Ken Greer by September 1975 and merged into the C shell in December 1983. Ken Greer based the shell on the TENEX operating system (hence, the “t” in `tsch`).

UNIX Fifth Edition licensed to universities for free.

Quantum Computing R.P. Poplavskii publishes “Thermodynamical models of information processing” (in Russian) showing the computational infeasibility of simulating quantum systems on classical computers because of the superposition problem.

Programming Languages: RATFOR; Scheme; TENEX shell; Tiny BASIC

Computers: Altair 880 (first personal computer); Fairchild F-8 (microprocessor); MOS Technology 6502 (microprocessor); Burroughs ILLIAC IV (150 MFLOPS)

Technology: single board computer; laser printer (commercial release by IBM)

1976

Design System Language, a forerunner of **PostScript**, is created in 1976. The Forth-like language handles three dimensional databases.

SASL (Saint Andrews Static Language) is created by D. Turner in 1976. Intended for teaching functional programming. Based on ISWIM. Unlimited data structures.

CP/M, an operating system for microcomputers, was created by Gary Kildall in 1976.

PWB shell The PWB shell or Mashey shell, abbreviated `sh`, was a variation of the Thompson shell that had been augmented by John Mashey and others at Bell Labs. The Mashey shell was distributed with the Programmer's Workbench UNIX in 1976.

Operating Systems: CP/M

Programming Languages: Design System language; SASIL

Computers: Zilog Z-80 (microprocessor); Cray 1 (250 MFLOPS); Apple I

Software: PWB shell

Technology: inkjet printer; Alan Kay's Xerox NoteTaker developed at Xerox PARC

1977

Icon, based on SNOBOL, was created in 1977 by faculty, staff, and students at the University

of Arizona under the direction of Ralph E. Griswold. Icon uses some programming structures similar to pascal and C. Structured types include list, set, and table (dictionary).

OPS5 was created by Charles Forgy in 1977.

FP was presented by John Backus in his 1977 Turing Award lecture *Can Programming be Liberated From the von Neumann Style? A Functional Style and its Algebra of Programs*.

Modula (MODUlar LAnguage) was created by Niklaus Wirth, who started work in 1977. Modula-2 was released in 1979.

Bourne shell The Bourne shell, created by Stephen Bourne at AT&T's Bell Labs as a scripting language, was released in 1977 as the default shell in the Version 7 Unix release distributed to colleges and universities. It gained popularity with the publication of *The UNIX Programming Environment* by Brian W. Kernighan and Rob Pike. The book was the first commercially published tutorial on shell programming.

BSD UNIX The University of California, Berkeley, released the Berkeley Software Distribution (BSD) version of UNIX, based on the 6th edition of AT&T UNIX.

Programming Languages: Bourne shell; FP; Icon; Modula; OPS5

Computers: DEC VAX-11; Apple II; TRS-80; Commodore PET; Cray 1A

Games: Atari 2600 (first popular home video game consle)

1978

CSP was created in 1978 by C.A.R. Hoare.

“C.A.R. Hoare wrote a paper in 1978 about parallel computing in which he included a fragment of a language. Later, this fragment came to be known as CSP. In it, process specifications lead to process creation and coordination. The name stands for Communicating Sequential Processes. Later, the separate computer language Occam was based on CSP.” —Language Finger, [Maureen and Mike Mansfield](#) Library, University of Montana.

C Shell The C shell, abbreviated `csh`, was created by Bill Joy, a graduate student at the University of California, Berkeley. With additional work by Michael Ubell, Eric Allman, Mike O'Brien, and Jim Kulp, it was released in the 2BSD release of BSD Unix in 1978.

It became common to use the C shell for everyday interactive computing and to use the Bourne shell for script programming.

UNIX The System V flavor of UNIX started.

Operating Systems: Apple DOS 3.1; VMS (later renamed OpenVMS)

Programming Languages: C shell; CSP

Computers: Intel 8086 (microprocessor)

Games: Space Invaders (arcade game using raster graphics; so popular in Japan that the government has to quadruple its supply of Yen)

Technology: LaserDisc

1979

Modula-2 was released in 1979. Created by Niklaus Wirth, who started work in 1977.

VisiCalc (VISIble CALculator) was created for the Apple II personal computer in 1979 by Harvard MBA candidate Daniel Bricklin and programmer Robert Frankston.

REXX (REstructured eXtended eXecutor) was designed by Michael Cowlishaw of IBM UK Laboratories. REXX was both an interpreted procedural language and a macro language. As a macro language, REXX can be used in application software.

Work started on **C with Classes**, the language that eventually became C++.

Programming Languages: C with Classes; Modula-2; REXX

Computers: Motorola MC68000 (microprocessor); Intel 8088 (microprocessor)

Software: VisiCalc

Games: Lunar Lander (arcade video game, first to use vector graphics); Asteroids (vector arcade game); Galaxian (raster arcade game, color screen); first Multi-User Dungeon (MUD, written by Roy Trubshaw, a student at Essex University, forerunner of modern massively multiplayer games); Warrior (first head-to-head arcade fighting game)

Technology: first spreadsheet (VisiCalc); object oriented programming; compact disk; Usenet discussion groups

1980s

Some operating systems from the 1980s include: AmigaOS, DOS/VSE, HP-UX, Macintosh, MS-DOS, and ULTRIX.

The 1980s saw the commercial release of the graphic user interface, most famously the Apple Macintosh, Commodore Amiga, and Atari ST, followed by Microsoft's Windows.

1980

dBASE II was created in 1980 by Wayne Ratliff at the Jet Propulsion Laboratories in Pasadena, California. The original version of the language was called **Vulcan**. Note that the first version of dBASE was called dBASE II. At the time people distrusted the first version of software,

SmallTalk-80 released.

Quantum Computing Yuri Manin proposes the idea of quantum computing.

Operating Systems: OS-9

Computers: Commodore VIC-20; ZX80; Apple III

Software: dBASE II

Games: Battlezone (vector arcade video game, dual joystick controller and periscope-like viewer); Berzerk (raster arcade video game, used primitive speech synthesis); Centipede (raster arcade video game, used trackball controller); Missile Command (raster arcade video game, used trackball controller); Defender (raster arcade video game); Pac-Man (raster arcade video game); Phoenix (raster arcade video game, use of musical score); Rally-X (raster arcade video game, first game to have a bonus round); Star Castle (vector arcade video game, color provided by transparent plastic screen overlay); Tempest (vector arcade video game, first color vector game); Wizard of Wor (raster arcade video game)

1981

Relational Language was created in 1981 by Clark and Gregory.

Quantum Computing Tommaso Toffoli introduces the reversible Toffoli gate. Together with the NOT and XOR gates providing a universal set for classical computation on a quantum computer.

Operating Systems: MS-DOS; Pilot

Programming Languages: Relational Language

Computers: 8010 Star; ZX81; IBM PC; Osborne 1 (first portable computer); Xerox Star; MIPS I (microprocessor); CDC Cyber 205 (400 MFLOPS)

Games: Donkey Kong (raster arcade video game); Frogger (raster arcade video game); Scramble (raster arcade video game, horizontal scrolling); Galaga (raster arcade video game); Ms. Pac-Man (raster arcade video game); Qix (raster arcade video game); Gorf (raster arcade video game, synthesized speech); Zork (first adventure game)

Technology: portable PC; ISA bus; CGA video card

1982

ANSI C The American National Standards Institute (ANSI) formed a technical subcommittee, X3J11, to create a standard for the C language and its run-time libraries.

InterPress, the forerunner of **PostScript**, was created in 1982 by John Warnock and Martin Newell at Xerox PARC.

Operating Systems: SunOS

Programming Languages: ANSI C; InterPress

Computers: Cray X-MP; BBC Micro; Commodore C64 (first home computer with a dedicated sound chip); Compaq Portable; ZX Spectrum; Atari 5200; Intel 80286 (microprocessor)

Games: BurgerTime (raster arcade video game); Dig Dug (raster arcade video game); Donkey Kong Junior (raster arcade video game); Joust (raster arcade video game); Moon Patrol (raster arcade video game, first game with parallax scrolling); Pole Position (raster arcade video game); Q*bert (raster arcade video game); Robotron 2084 (raster arcade video game, dual joystick); Time Pilot (raster arcade video game); Tron (raster arcade video game); Xevious (raster arcade video game, first game promoted with a TV commercial); Zaxxon (raster arcade video game, first game to use axonometric projection)

Technology: MIDI; RISC; IBM PC compatibles

Theory: Quantum cryptography proposed

1983

Ada was first released in 1983 (ADA 83), with major releases in 1995 (ADA 95) and 2005 (ADA 2005). Ada was created by the U.S. Department of Defense (DoD), originally intended for embedded systems and later intended for all military computing purposes. Ada is named for Augusta Ada King, the Countess of Lovelace, the first computer programmer in modern times.

Concurrent Prolog was created in 1983 by Shapiro.

Parlog was created in 1983 by Clark and Gregory.

C++ was developed in 1983 by Bjarne Stroustrup at Bell Telephone Laboratories to extend C for object oriented programming.

Turbo Pascal, a popular Pascal compiler, was released.

The University of California at Berkeley released a version of UNIX that included TCP/IP.

tcsh The improved C shell, abbreviated `tcsh`, created by Ken Greer, was merged into the C shell in December 1983. Ken Greer based the shell on the TENEX operating system (hence, the “t” in `tcsh`). Mike Ellis, Paul Placeway, and Christos Zoulas made major contributions to `tcsh`.

Korn shell The Korn shell, abbreviated `ksh`, was created by David Korn at AT&T's Bell Labs and announced at USENIX on July 14, 1983. Mike Veach and Pat Sullivan were also early contributors. The Korn shell added C shell features to the Bourne shell.

In 1983, Richard Stallman founded the GNU project, which eventually provided the tools to go with Linux for a complete operating system. The GNU project intended to create a complete open source UNIX-like operating system, with GNU Hurd as the kernel. Richard Stallman created the GNU General Public License (GPL).

Operating Systems: Lisa OS

Programming Languages: Ada; C++; Concurrent Prolog; Korn shell; Parlog; tcsh; Turbo Pascal

Computers: Apple IIe; Lisa; IBM XT; IBM PC Jr; ARM (microprocessor); Cray X-MP/4 (941 MFLOPS)

Games: Dragon's Lair (raster arcade video game, first video game to use laserdisc video; note that the gambling device Quarterhorse used the laserdisc first); Elevator Action (raster arcade video game); Gyruss (raster arcade video game, used the musical score Toccata and Fugue in D minor by Bach); Mappy (raster arcade video game, side scrolling); Mario Bros. (raster arcade video game); Spy Hunter (raster arcade video game, musical score Peter Gunn); Star Wars (vector arcade video game, digitized samples from the movie of actor's voices); Tapper (raster arcade video game); Lode Runner (Apple)[E]; Journey (arcade video game includes tape of the song *Separate Ways* leading to licensed music in video games)

Technology: math coprocessor; PC harddisk

1984

Objective C, an extension of C inspired by SmallTalk, was created in 1984 by Brad Cox. Used to write NextStep, the operating system of the Next computer.

Standard ML, based on ML, was created in 1984 by R. Milner of the University of Edinburgh.

PostScript was created in 1984 by John Warnock and Chuck Geschke at Adobe.

When the AT&T broke up in 1984 into “Baby Bells” (the regional companies operating local phone service) and the central company (which had the long distance business and Bell Labs), the U.S. government allowed them to start selling computers and computer software. UNIX broke into the System V (sys-five) and Berkeley Software Distribution (BSD) versions. System V was the for pay version and BSD was the free open source version.

AT&T gave academia a specific deadline to stop using “encumbered code” (that is, any of AT&T's source code anywhere in their versions of UNIX). This led to the development of free open source projects such as FreeBSD, NetBSD, and OpenBSD, as well as commercial operating systems based on the BSD code.

Meanwhile, AT&T developed its own version of UNIX, called System V. Although AT&T eventually sold off UNIX, this also spawned a group of commercial operating systems known as Sys V UNIXes.

UNIX quickly swept through the commercial world, pushing aside almost all proprietary mainframe operating systems. Only IBM's MVS and DEC's OpenVMS survived the UNIX onslaught.

Some of the famous official UNIX versions include Solaris, HP-UX, Sequent, AIX, and Darwin. Darwin is the UNIX kernel for Apple's OS X, AppleTV, and iOS (used in the iPhone, iPad, and iPod).

The BSD variant started at the University of California, Berkeley, and includes FreeBSD, NetBSD, OpenBSD, and DragonFly BSD.

Most modern versions of UNIX combine ideas and elements from both Sys-V and BSD. Other UNIX-like operating systems include MINIX and Linux.

In 1984, Jim Gettys of Project Athena and Bob Scheifler of the MIT Laboratory for Computer Science collaborated on a platform-independent graphics system to link together heterogeneous multi-vendor systems. Project Athena was a joint project between Digital Equipment Corporation (DEC), IBM, and MIT. X version 1 was released in May 1984.

Operating Systems: GNU project started; MacOS 1, X Window System (X11)

Programming Languages: Objective C; PostScript; Standard ML

Computers: Apple Macintosh; IBM AT; Apple IIc; MIPS R2000 (microprocessor); M-13 (U.S.S.R., 2.4 GFLOPS); Cray XMP-22

Software: Apple MacWrite; Apple MacPaint

Games: 1942 (raster arcade video game); Paperboy (raster arcade video game, unusual controllers, high resolution display); Punch-Out (raster arcade video game, digitized voice, dual monitors)

Technology: WYSIWYG word processing; LaserJet printer; DNS (Domain Name Server); IDE interface

1985

Digidesign Sound Designer

1987

Digidesign Sound Designer Universal (1.5)

1989

Digidesign Sound Tools

Digidesign Sound Designer II

1991

Digidesign Pro Tools

1992

Digidesign Sound Tools II

1993

Digidesign Pro Tools II

1994

Digidesign Pro Tools TDM

Digidesign Pro Tools TDM

Pro Tools III

1996

Pro Tools PCI

1997

Pro Tools 4

Pro Tools | 24

1998

Pro Tools | 24 MX

1999

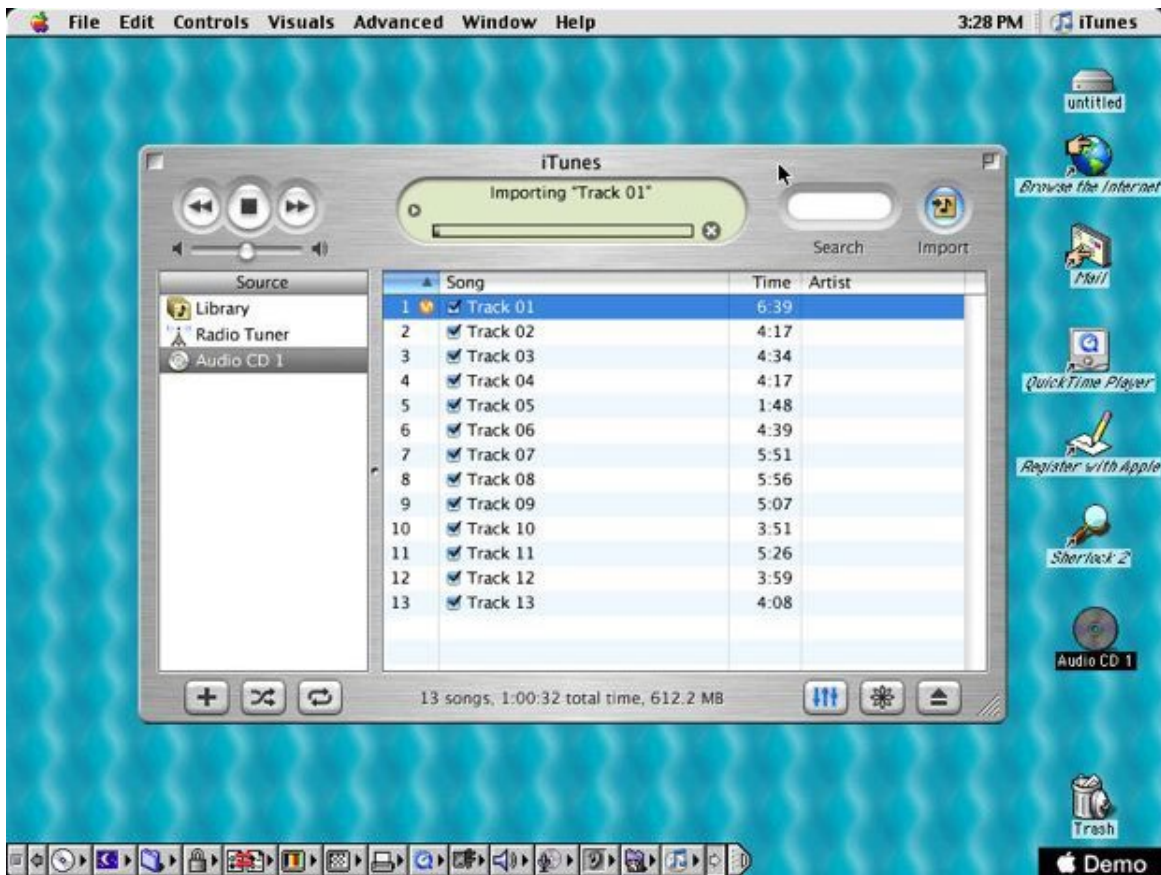
Pro Tools 5

Pro Tools LE

2001

Pro Tools Free

iTunes 2



2002

Pro Tools | 24 HD

2003

Pro Tools 6

2005

Pro Tools 7

2008

Pro Tools 8

2010

Pro Tools 9

2011

Pro Tools | HDX

Pro Tools 10

2013

Pro Tools 11

2015

Pro Tools 12

Pro Tools | First

1990s

Some operating systems from the 1990s include: BeOS, BSDi, FreeBSD, NeXT, OS/2, Windows 95, Windows 98, and Windows NT.

2000s

Some operating systems from the 2000s include: Mac OS X, Syllable, Windows 2000, Windows Server 2003, Windows ME, and Windows XP.

introduction to programming

introduction to programming

chapter 0

This entire section comes from one of my websites. The original version offered lessons in both C and Pascal, which at the time the material was written were both widely used languages.

I will slowly over time add material on JavaScript (because anyone with a computing device, text editor, and web browser can start coding in JavaScript for free with no additional downloads or installs).

programming

programming

summary

chapter 1

This chapter is intended as an introduction to computer programming.

Programming is problem solving and writing instructions for a computer.

The principles of programming are independent of the computer programming language used. Different languages have different strengths and weaknesses, making some kinds of programs easier or more difficult to write, but the basic principles remain the same regardless of language.

A skilled programmer should be able to switch to a new programming language in a few hours.

On the other hand, beginners should pick one language and learn it before attempting a second language. Normally this choice will be made by the school or the professor.

If you are studying on your own, you get to pick the language you start with. I strongly suggest JavaScript because you can create plain text (ASCII) files and load them into any web browser and start learnign programming for free (assuming you already have a device).

This free text book includes information on multiple programming languages. Unless instructed otherwise, you should concentrate on the language you are learning and skip over the others. Trying to learn the syntax and semantics of multiple programming languages at the same time as learning the basics of programming is a recipe for utter confusion.

“As long as programmers cherish their freedom not only to design their own clever software, but also to modify adopted software according to their likings, a proper design discipline remains unlikely. And as long as companies secretly cherish complexity as an effective protection against being copied, there is little hope for dramatic improvements of the state of the art.” —Niklaus Wirth

programming as a skill

I would like to strongly suggest that learning the principles of computer programming is far more valuable than learning a specific programming language.

“Hire a programmer. He’s a programmer. You don’t need to hire a Java programmer. By the way, you should do that now anyway. Do not hire Java programmers, not because Java programmers are bad. But you should not be asking, “excuse me, what language do you program in? We’re only hiring Java programmers here.” Learning a language is a matter of a week. Oh, and to get skillful in the platform is a matter of another week or two or three or a month. Finding someone who actually knows how to write code, that’s the hard problem, so you don’t ask, “you must know Sprint.” No, you do not have to know Sprint. “you must know JavaScript.” No, you don’t have to know JavaScript. “Can you write code?” Show me code in any language. If you can write code, I’ll hire you.” —Robert C. Martin, [The Last Programming Language](#), approximately 37:09

“Learning how to code in any one particular [computer] language is not going to be worthwhile beyond 10 or 20 years. Learning how to problem-solve using algorithms and how technology works and how it’s built is going to last a century at least,” —Hadi Partovi, cofounder of [code.org](#), *For some, learning coding is a calculated strategy*, *Los Angeles Times*, Business Section, Saturday, August 2, 2014, p. B1

other

“7. It is easier to write an incorrect program than understand a correct one.” —Alan Perlis, [Epigrams on Programming](#), ACM’s SIGPLAN Notices Volume 17, No. 9, September 1982, pages 7-13

“93. When someone says ‘I want a programming language in which I need only say what I wish done,’ give him a lollipop.” —Alan Perlis, [Epigrams on Programming](#), ACM’s SIGPLAN Notices Volume 17, No. 9, September 1982, pages 7-13

size of programs

chapter 2

summary

The educational goal of this chapter is to introduce the concept of differences in scale or size of programming projects and how the size and complexity of a program impacts the task of programming.

Programs vary in size. Bad habits learned with small or trivial programs might get you into real trouble with medium or large programs.

size of programs

Programs are generally divided into three basic sizes: trivial, small, and large.

Trivial programs are programs that a skilled programmer can write in less than two days of coding.

Small programs are programs that one skilled programmer can write in less than one year of full time work.

Large programs are programs that require more than two to five man-years of labor, normally written by programming teams (which can exceed 1,000 skilled workers).

These estimates are approximate and there are obvious gaps in the gray zone between the sizes. Further, there can be huge differences in individual abilities.

There are famous examples of programmers rewriting large programs overnight, but those already had substantial parts already written.

Larry Ellison wrote the first version of Oracle database with Ed Oates and Bob Miner in about six months. That is a genius exception. Data bases typically take large teams (sometimes hundreds of programmers) at least a year.

Bill Gates, copying and pasting from the source code of three working open source versions,

took more than six months to create a bug-filled BASIC compiler and then hired a team of six skilled programmers who spent more than six more months to get rid of enough bugs to make the compiler somewhat usable (a total of more than three man-years). That is an idiot exception. A BASIC compiler typically takes a skilled programmer a few hours to create. Note that Bill Gates takes credit for quickly having created a BASIC compiler, but according to other sources he was sued for having illegally used open source code for commercial purposes, forcing him to spend a great deal of time attempting to do a project that many programmers of the day could successfully finish in hours.

impact on good programming practices

“As long as there were no machines, programming was no problem at all: when we had a few weak computers, programming became a mild problem, and now that we have gigantic computers, programming has become as equally gigantic problem. In this sense the electronic industry has solved not a single problem, it has only created them — it has created the problem of using its products.”

—E W Dijkstra, “The Humble Programmer”, Turing Award Lecture, *CACM* Vol 15, Number 10, October 1972

Almost every program assigned in a class setting will be trivial, simply because there isn't enough time in a quarter or semester for longer programs.

Each programming assignment will concentrate on one or a small number of specific programming concepts.

The artificial nature of school programming assignments cause most students to question the utility of modern programming practices, especially the time and effort spent on form and documentation.

These practices are the result of decades of real world programming.

Successful programs tend to have a long lifetime. Programmers will have to look at existing source code, figure out what is going on, and then correctly modify the program to add new features or update existing features to meet changing real world conditions.

UNIX style

The UNIX philosophy on programming is to encourage a lot of small tools (programs) that work together to complete a task (usually threaded together with a shell script). This bottom-up approach to programming encourages the reuse and sharing of software. The typical UNIX (or LINUX) distribution includes hundreds of small standardized tools that allow a skilled UNIX programmer (or even a skilled UNIX administrator or user) to immediately do useful large scale work.

object-oriented programming

Many students openly question why they are going to so much extra work to create object-oriented projects when procedural programming will clearly be sufficient and involve less work.

The simple answer is that object-oriented programming is one of the few proven successful methods for cutting costs and improving reliability of large scale real-world projects.

kinds of programs

chapter 3

summary

The educational goal of this chapter is to introduce the basic different kinds of programming in common use.

The two major kinds of programming are systems programming and applications programming.

list of kinds of programming

There are two basic kinds of programming: system and application.

System programming deals with the use of a computer system. This includes such things as the operating system, device drivers for input and output devices, and systems utilities.

Application programming deals with the programs directly used by most people.

Application programming is generally divided further into scientific and business programming.

Scientific programming is work in the scientific, engineering, and mathematical fields. Often the programmers are the researchers who use the programs.

Business programming is work in the data processing field, including large scale business systems, web-based businesses, and office applications. It is exceedingly rare for these kinds of

programs to be created by the person who uses them.

Another large category of programming is programming for **personal or home** use. This includes **games**. Historically, many advances in computer science occurred in the development of computer and video games.

Embedded systems are programs that are built into specific hardware, such as the computer systems in an automobile or microwave oven. These programs combine features of operating systems and application program into a single monolithic system.

Scripting is a simplified version of programming originally intended for use primarily by non-programmers. In practice, most non-programmers have trouble with scripting languages. Some professional programmers have built very useful, sometimes intricate systems using scripting languages, especially those contained in office software (such as word processors or spreadsheets).

Web sites serve a variety of purposes, from business to eCommerce to social media to to entertainment to education to non-profit and more.

programming languages

chapter 4

summary

The educational goals of this chapter are to familiarize the student with the kinds of programming languages and the basic tools for programming. Key terminology is introduced (the student should know the definition of terms in bold). This is followed by some **C** specific information.

Programming languages vary from low level assemblers to high level languages.

“19. A language that doesn’t affect the way you think about programming, is not worth knowing.” —Alan Perlis, [*Epigrams on Programming*](#), ACM’s SIGPLAN Notices Volume 17, No. 9, September 1982, pages 7-13

direct programming

Originally computers were programmed directly in a “language” that the computer understood.

This direct programming could involve directly wiring the program into the computer. In some cases, this involved a soldering iron. In other cases there was some kind of plug-board to make it easier to change the programmed instructions. This method was known as **hard wiring**.

Large telegraph networks and later large telephone networks became so complex as to essentially be a computer on a system-wide basis. Many of the ideas (especially logic circuits) that were later necessary to create computers were first developed for large scale telegraph and

telephone systems.

In some early computers the programming could be accomplished with a set of switches. The use of **front panel** switches (and corresponding indicator lights) continued as an option on many mainframe and minicomputer systems. Some microcomputer systems intended for hobbyists and for dedicated systems also had some kind of front panel switches.

Another method was the use of **punched cards**. This was a technology originally developed for controlling early industrial age factories, particularly large looms. The designs or patterns for the cloth would be programmed using punched cards. This made it easy to switch to new designs. Some of the large looms became so complex that they were essentially computers, although that terminology wasn't used at the time.

machine code and object code

Both the front panel switch and the punched card methods involved the use of numeric codes. Each numeric code indicated a different machine instruction. The numbers used internally are known as **machine code**. The numbers on some external media, such as punched cards (or disk files) are known as **object code**.

assembly and assemblers

One of the early developments was a **symbolic assembler**. Instead of writing down a series of binary numbers, the programmer would write down a list of machine instructions, using human-readable symbols. A special program, the **assembler**, would convert these symbolic instructions into object or machine code.

John von Neumann famously insisted that all coding on the ENIAC be done in object code. His team went behind his back to create the first assembler.

Assembly languages have the advantage that they are easier to understand than raw machine code, but still give access to all of the power of the computer (as each assembler symbol translates directly into a specific machine instruction).

Assembly languages have the disadvantage that they are still very close to machine language. These can be difficult for a human to follow and understand and time-consuming for a human to write. Also, programs written in assembly are tied to a specific computer hardware and can't be reused on another kind of computer.

The human readable version of assembly code is known as **source code** (it is the source that the assembler converts into object code). All programs written in high level languages are also called source code.

high level languages

High level languages are designed to be easier to understand than assembly languages and allow a program to run on multiple different kinds of computers.

The story of the first successful high level language, **FORTRAN I**, is fascinating.

The source code written in high level languages needs to be translated into object code. The two basic approaches are compilers and interpreters. Some programming languages are available in both interpreted and compiled versions.

High level languages have usually been designed to meet the needs of some particular kind of programming. For example, **FORTRAN** was originally intended for scientific programming. **COBOL** was originally intended for business programming and data processing. SQL was originally intended for data base queries. **C** was originally intended for systems programming. **LISP** was originally intended for list processing. **PHP** was originally intended for web scripting. **Ada** was originally intended for embedded systems. **BASIC** and **Pascal** were originally intended as teaching languages.

Some high level languages were intended to be general purpose programming languages. Examples include **PL/I** and Modula-2. Some languages that were originally intended for a specific purpose have turned into general purpose programming languages, such as **C** and **Pascal**.

compilers

Compilers convert a finished program (or section of a program) into object code. This is often done in steps. Some compilers convert high level language instructions into assembly language instructions and then an assembler is used to create the finished object code.

Some compilers convert high level language instructions into an **intermediate language**. This intermediate language is platform-independent (it doesn't matter which actual computer hardware is eventually used). The intermediate language is then converted into object code for a specific kind of computer. This approach makes it easier to move (or **port**) a compiler from one kind of computer to another. Only the last step (or steps) need to be rewritten, while the main compiler is reused.

Compiled code almost always runs faster than interpreted code. An **optimizing compiler** examines a high level program and figures out ways to optimize the program so that it runs even faster.

C

A C program is considered to be **strictly conforming** to ANSI C if the program only uses features and libraries as they are described in the ANSI standard (with no additional optional features or extensions).

A **conforming hosted implementation** accepts any strictly conforming program. This applies

to a program that is intended to run on an operating system.

A **conforming freestanding implementation** accepts any strictly conforming program that doesn't use any library facilities other than those in the header files `float.h`, `limits.h`, `stdarg.h`, and `stddef.h`. This applies to a program that is intended to run on an embedded system or other environment with minimal operating system support (such as no file system)..

compilers and assemblers

A brief explanation of the difference between compilers and assemblers.

An assembler converts symbolic (human readable text) instructions into their corresponding machine or object instructions. There is generally a one-to-one correspondence between assembler instructions and machine instructions (at the macro-machine level).

A compiler converts a high level language into machine or object code. Typically there are many machine instructions for every high level language instruction. There are some exceptions — some older languages, such as **COBOL** and **FORTRAN**, had several instructions that translated directly into a single machine instruction, but even in those cases, most of the useful portions of the language were translated into many machine instructions.

An example from the **C** programming language:

```
if (x==0) z=3; /* test to see if x is zero, if x is
zero, then set z to 3 */
```

The same example in 8080 assembly language (everything after the semicolon ; is a comment to help you understand):

```
LXIH $E050 ; point to location of variable x (Load Double Immediate into
HL register pair)
MOVAM ; load value of x into the accumulator (MOVE to A register from
Memory)
CMPA ; test the value of the accumulator (CoMPare A register with itself)
JNZ @1 ; if not zero, then skip variable assignment (Jump is Not Zero)
MVIA #3 ; load three (new value for variable z) into accumulator (MoVe
Immediate into A register the number three)
LXIH $E060 ; point to location of variable z (Load Double Immediate into
HL register pair)
MOVMA ; store three into variable z (MOVE to Memory from A register)
@1 NOP ; drop through or skip to here to continue program (No OPeration)
DS $E050 ; reserve memory for variable x (Data Storage)
DS $E060 ; reserve memory for variable z (Data Storage)
```

The same example in 8080 machine code (the comments after the semicolon ; wouldn't normally be included, but are added to help you follow along, in a real case of object code it would be just binary/hexadecimal numbers):

```

21 ; LXIH
50 ; data address
E0 ; data address
7E ; MOVAM
BF ; CMPA
C2 ; JNZ
0D ; code address
00 ; code address
1E ; MVIA
03 ; data
21 ; LXIH
60 ; data address
E0 ; data address
77 ; MOVMA
00 ; NOP

```

and later in memory: the data storage

```

$E050 ; variable x, unknown contents
$E060 ; variable y, becomes three (3)

```

You will notice that there is one machine instruction for each assembly instruction (some instructions are followed by data or addresses), while there are many assembly or machine instructions for one C instruction.

linkers

As programs grow in size, requiring teams of programmers, there is a need to break them up into separate files so that different team members can work on their individual assignments without interfering with the work of others. Each file is compiled separately and then combined later.

Linkers are programs that combine the various parts of a large program into a single object program. Linkers also bring in support routines from **libraries**. These libraries contain utility and other support code that is reused over and over for lots of different programs.

Historically, linkers also served additional purposes that are no longer necessary, such as resolving relocatable code on early hardware (so that more than one program could run at the same time).

loaders

A **loader** is a program that loads programs into main memory so that they can be run. In the past, a loader would have to be explicitly run as part of a job. In modern times the loader is hidden away in the operating system and called automatically when needed.

interpreters

Interpreters convert each high level instruction into a series of machine instructions and then immediately run (or execute) those instructions. In some cases, the interpreter has a library of

routines and looks up the correct routine from the library to handle each high level instruction.

Interpreters inherently run more slowly than the same software compiled. In the early days of computing this was a serious problem. Since the mid-1980s, computers have become fast enough that interpreters run fine for most purposes.

Most of the scripting languages common on the web and servers are interpreted languages. This includes [JavaScript](#), [Perl](#), [PHP](#), [Python](#), [Ruby](#).

Note that some modern programming languages (including [Java](#) and [Python](#)) translate the raw text into an intermediate numeric code (usually a byte code) for a virtual machine. This method is generally faster than older traditional methods of interpreting scripts and has the advantage of providing a platform-independent stored code.

editors

An **editor** is a program that is used to edit (or create) the source files for programming. Editors rarely have the advanced formatting and other features of a regular word processor, but sometimes include special tools and features that are useful for programming.

Two important editors are emacs and vi from the UNIX world. I personally use [Tom Bender's Tex-Edit Plus](#), which is available in multiple different languages (Danish, English, French, German, Italian, Japanese, Spanish). Note that text-Edit Plus no longer works on the latest versions of Macintosh. If anyone can contact Tom Bender, I will gladly update his program to run on the latest machines, for free.

command line interface

A **command line interface** is an old-style computer interface where the programmer (or other person) controls the computer by typing lines of text. The text lines are used to give instructions (or commands) to the computer. The most famous example of a command line interface is the UNIX shell.

In addition to built-in commands, command line interfaces could be used to run programs. Additional information could be passed to a program, such as names of files to use and various “program switches” that would modify how a program operated.

See the information on [how to use the shell](#).

development environment

A **development environment** is an integrated set of programs (or sometimes one large monolithic program) that is used to support writing computer software. Development environments typically include an editor, compiler (or compilers), linkers, and various additional support tools. Development environments may include their own limited command line interface

specifically intended for programmers.

The term “development environment” can also be used to mean the collection of programs used for writing software, even if they aren’t integrated with each other.

Because there are a huge number of different development environments and a complete lack of any standardization, the methods used for actually typing in, compiling, and running a program are *not* covered by this book. Please refer to your local documentation for details.

The development environment for UNIX, Linux, and Mac OS X are discussed in the chapter on [shell programming](#).

Stanford introduction

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The C Language

C is a professional programmer’s language. It was designed to get in one’s way as little as possible. Kernighan and Ritchie wrote the original language definition in their book, *The C Programming Language* (below), as part of their research at AT&T. Unix and C++ emerged from the same labs. For several years I used AT&T as my long distance carrier in appreciation of all that CS research, but hearing “thank you for using AT&T” for the millionth time has used up that good will.

Some languages are forgiving. The programmer needs only a basic sense of how things work. Errors in the code are flagged by the compile-time or run-time system, and the programmer can muddle through and eventually fix things up to work correctly. The C language is not like that.

The C programming model is that the programmer knows exactly what they want to do and how to use the language constructs to achieve that goal. The language lets the expert programmer express what they want in the minimum time by staying out of their way.

C is “simple” in that the number of components in the language is small-- If two language features accomplish more-or-less the same thing, C will include only one. C’s syntax is terse and the language does not restrict what is “allowed” -- the programmer can pretty much do whatever they want.

C’s type system and error checks exist only at compile-time. The compiled code runs in a stripped down run-time model with no safety checks for bad type casts, bad array indices, or bad pointers. There is no garbage collector to manage memory. Instead the programmer manages

heap memory manually. All this makes C fast but fragile.

Analysis -- Where C Fits

Because of the above features, C is hard for beginners. A feature can work fine in one context, but crash in another. The programmer needs to understand how the features work and use them correctly. On the other hand, the number of features is pretty small.

Like most programmers, I have had some moments of real loathing for the C language. It can be irritatingly obedient -- you type something incorrectly, and it has a way of compiling fine and just doing something you don't expect at run-time. However, as I have become a more experienced C programmer, I have grown to appreciate C's straight-to-the point style. I have learned not to fall into its little traps, and I appreciate its simplicity.

Perhaps the best advice is just to be careful. Don't type things in you don't understand. Debugging takes too much time. Have a mental picture (or a real drawing) of how your C code is using memory. That's good advice in any language, but in C it's critical.

Perl and Java are more "portable" than C (you can run them on different computers without a recompile). Java and C++ are more structured than C. Structure is useful for large projects. C works best for small projects where performance is important and the programmers have the time and skill to make it work in C. In any case, C is a very popular and influential language. This is mainly because of C's clean (if minimal) style, its lack of annoying or regrettable constructs, and the relative ease of writing a C compiler.

Other Resources

The C Programming Language, 2nd ed., by Kernighan and Ritchie. The thin book which for years was the bible for all C programmers. Written by the original designers of the language. The explanations are pretty short, so this book is better as a reference than for beginners.

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end of Stanford introduction

standards and variants

chapter 5

summary

The educational goal of this chapter is to make the student aware that there are official versions of many programming languages, but that in practice there are a lot of variations (and that a programmer must be able to adapt to changes and variations).

Programming languages can meet official standards or come in variants and dialects.

standards and variants

Programming languages have traditionally been developed either by a single author or by a committee.

Typically after a new programming language is released, new features or modifications, called **variants**, start to pop-up. The different versions of a programming language are called **dialects**. Over time, the most popular of these variants become common place in all the major dialects.

If a programming language is popular enough, some international group or committee will create an official **standard** version of a programming language. The largest of these groups are **ANSI** (American national Standards Institute) and **ISO** (International Organization for Standardization).

While variants and dialects may offer very useful features, the use of the non-standard features will lock the program into a particular development environment or compiler and often

will lock the program into a specific operating system or even hardware platform.

Use of official standards allows for **portability**, which is the ability to move a program from one machine or operating system to another.

While variants were traditionally introduced in an attempt to improve a programming language, Microsoft started the practice of intentionally creating variants to lock developers into using Microsoft products. In some cases the Microsoft variants offered no new features, but merely changed from the established standard for the sake of being different. Microsoft lost a lawsuit with Sun Microsystems for purposely creating variants to Java in hopes of killing off Java in favor of Microsoft languages. Note that Java is now owned by Oracle and Microsoft is no longer trying to break it.

critical reasoning

critical reasoning

This chapter looks at critical reasoning.

Important Note: While critical reasoning is a great tool for computers, it clashes with most social institutions, including business, law, and government. Business persons and government officials do not normally react well to critical reasoning and science. Do not confuse the two realms. Use critical reasoning and mathematics in your work, but switch to social skills for all interactions with those in positions of power or authority.

tinkering and thought

The vast majority of programmers, system administrators, data base administrators, and other tech personnel are tinkerers.

Tinkerers have no real understanding of the objects they work on. Tinkerers use trial and error until things work better.

The best tinkerers are successful because they have a good intuition about what guesses might work and over time they have collected a set of superstitions that work most of the time for the most common problems.

The very best programmers, system administrators, data base administrators, and other tech personnel use rational thought and critical reasoning to understand how a system works and fails and uses a combination of knowledge, skill, and imagination to craft appropriate solutions.

This chapter is about how to use critical reasoning. The vast majority of readers can safely skip over this material.

engineering and business

Engineering and business are fundamentally different. This web page is intended to help business persons successfully make use of engineers.

I will describe the fundamental difference, outline the basic web services, and discuss how to

get engineers to deliver what your business needs

fundamental difference

The fundamental difference is that business is a **social** activity and engineering is a **mathematical** activity. The computer is a pure mathematical machine.

In engineering (as well as science and mathematics), one plus one (1+1) always equals two (2), for all times and places, regardless of culture. The answer is the same for Stephen Hawking in modern Great Britain and Euclid in Egypt some two thousand years ago.

In business (as well as law and government), one plus one might be equal to three-and-a-quarter, trending up. But if it reaches six, consider that a bubble and sell before it falls. If someone is rich or powerful enough, they can demand that two plus two be whatever they need it to be — and nobody dare risk their wrath for failure to obey.

I am not exaggerating. The US Supreme Court ruled that tomatoes were vegetables, not fruits (for tax purposes). The California Supreme Court ruled that insects, including bees, are fish (for endangered species purposes).

Engineering is **absolute** and business is **relative**.

A business person needs to be aware that engineers think in a completely different manner and that their machines do **not** answer to money or power. Computers answer only to the laws of mathematics.

The reason that business persons often see disconcerting, strange characters among the geeks is because they are highly skilled at mathematics and mathematics doesn't take into account fashion or custom.

business and government

Business, government, law, and most social institutions are all subjective perception.

The clash between subjective business perceptions and the harsh absolutism of mathematics and computers is often confounding to programmers and other technical staff.

It makes sense to base business on perception because consumerism is based not on actual needs but on selling wants and desires.

It makes sense to base government and law on perception because that allows those in power to continually adjust their rulings to meet their own needs.

perception and proof

Reality is perceived. Mathematics is proven.

The existence of optical illusions illustrates the inherent lack of reliability of our perceptions of reality. Different testimony by witnesses to the same event highlight differences in perception by different observers. Some philosophers have questioned whether an objective reality even exists.

Mathematics is pure in abstraction. Mathematics has clear definitions and axioms, from which theorems can be proven true or false.

Philosophers have long examined this distinction.

Imhotep, the chief architect of the first two true pyramids in ancient Egypt, inventor of the scientific method, inventor of medical triage, and inventor of trigonometry, claimed that mathematics were the fundamental divine laws of physical reality.

Modern applied mathematics is based on the idea that mathematics models reality.

Computers simulate pure mathematics. Unlike pure math, physical hardware is subject to momentary glitches, such as electrical spikes, cosmic rays, and distant earthquakes.

objectivity and subjectivity

The goal in critical reasoning is objectivity.

The goal in artwork is subjectivity.

Both are valid goals. Kung Fu-Tze (Confucious), Aristotle, and Buddha all proposed some variation of the belief that humans need balance.

A few hundred years ago, European artists attempted to match exactly what they saw, which was called realism. Impressionism moved to attempting to capture the essential impression of a scene. Surrealism bent and warped reality. Abstract expressionism attempted to capture the abstract essence. Numerous other art movements employed new and different ways to look at the world and express artistic creativity.

Objectivity calls for a fair examination, an attempt to determine a greater truth.

Objective journalism asks six questions; who, what, when, where, why, and how.

classifications

classifications

summary

This chapter looks at classifications.

Classifying is the act of placing things into groups.

Two famous examples are the Dewey Decimal Classification used by some libraries and taxonomy, the classification of groups of biological organisms based on shared characteristics (the principal ranks are domain, kingdom, phylum, class, order, family, genus, and species).

concepts and referents

A **concept** is a category.

A **referent** is a specific member of a category.

Fido is a referent in the concept of dogs. Cats and dogs are referents in the concept of mammals. Mammals and reptiles are referents in the concept of animals.

species and genus

A **species** is a smaller, more specific group, while a **genus** is a larger, more general group.

Using the above example, domestic cats and dogs are species of the genus mammals, while mammals and reptiles are species of the genus animals.

Note that these older philosophical concepts of species and genus predate the more complex modern biological system of categories.

abstract and concrete

Each higher layer of genus becomes more abstract. Each lower layer of species becomes more concrete.

Abstract is a relative term.

Concrete is not limited to physical items. For example, specific emotions (sad, happy) are more concrete than emotional states.

classes and objects

You see this same kind of grouping in object oriented programming. A class is a genus (concept) and the various objects are the species (referent).

A **class** defines the characteristics (data) and behaviors (methods) of a group. An **object** is a specific individual (instance) of a group.

rules of classification

There are two basic rules for good classifications:

- (1) A set of classifications must be used according to a consistent principle that is mutually exclusive and jointly exhaustive.
- (2) Classifications must be made on essential attributes.

mutually exclusive

Mutually exclusive means that any particular species can only be in a single genus.

Green characters and Muppets are not mutually exclusive, because Kermit the Frog qualifies for both genres.

jointly exhaustive

Jointly exhaustive means that all of the species taken together (jointly) will make up the complete (exhaustive) set of the genus.

The species felines (cats) and canines (dogs) are not jointly exhaustive for the genus mammals, because there are still many additional creatures that qualify as mammals, but aren't felines or canines.

consistent principle

It is important to have a consistent principle for organizing your classifications.

The species of (1) green things and (2) big things and (3) mammals are not consistent because the first measure is color, the second size, and the third a biological group.

The species of red, green, and blue are consistent because they are all colors.

essential attributes

It is important that the choice of rule for classification be based on an essential attribute.

Organizing books by the colors of the covers would create a bizarre library, while organizing books by subject (such as the Dewey Decimal Classification) creates a library that is easy to use.

This is because the subject matter (or author) is an essential characteristic of a book, while the color of the cover isn't. The color of the cover can change from printing to printing.

levels of organization

The levels of organization need to make sense.

As an example, the Dewey Decimal Classification is made up of ten classes. Each class is divided into ten divisions. Each division is divided into ten sections.

Class 0 is Computer science, information & general works. Division 00 is Computer science, information & general works. Section 004 is Data processing & computer science, 005 is Computer programming, programs & data, and 006 is Special computer methods.

- 000 Computer science, information & general works
 - 000 Computer science, information & general works
 - 000 Computer science, knowledge & general works
 - 001 Knowledge
 - 002 The book (i.e. Meta writings about books)
 - 003 Systems
 - 004 Data processing & computer science
 - 005 Computer programming, programs & data
 - 006 Special computer methods
 - 007 (Unassigned)
 - 008 (Unassigned)
 - 009 (Unassigned)
 - 010 Bibliographies
 - 020 Library & information sciences
 - 030 Encyclopedias & books of facts
 - 040 Biographies
 - 050 magazines, journals & serials
 - 060 Associations, organizations & museums
 - 070 News media, journalism & publishing
 - 080 General collections
 - 090 Manuscripts & rare books
- 100 Philosophy and psychology

- 200 Religion
- 300 Social sciences
- 400 Language
- 500 Science
- 600 technology
- 700 Arts & recreation
- 800 Literature
- 900 History & geography

Make sure that your categories have a species-genus relationship. For example, an enzyme is a kind of protein and therefore they have a species-genus relationship, but an amino acid is a component part of a protein and therefore they don't have a species-genus relationship.

outlines

The outlines that you were taught in school are an example of a proper organization of classifications. Outlines developed specifically because they are useful tools for organizing a well-reasoned argument, presentation, or essay.

- I. first main topic
 - A. first subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
 - B. second subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
 - C. third subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
- II. second main topic
 - A. first subtopic
 - i. first inner topic

- a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
 - B. second subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
 - C. third subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
- III. third main topic
- A. first subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
 - B. second subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic
 - C. third subtopic
 - i. first inner topic
 - a. first innermost topic
 - b. second innermost topic
 - ii. second inner topic
 - a. first innermost topic
 - b. second innermost topic

elements

In Western antiquity, the ancient Egyptians and the Greeks developed the idea of four or five basic elements: fire, water, air, earth, and spirit. The Chinese developed the five basic elements of wood, fire, earth, metal, and water.

The Western elements represented the basic underlying principles of natures: three states of matter (earth = solid, water = liquid, and air = gas) and energy (fire = energy). The spirit or soul was sometimes included as a fifth element.

In modern Western civilization the word element was purposely reused to describe the fundamental chemical elements that make up matter.

Library of Congress Classification

The Library of Congress Classification system (LLC):

Class A - General Works

Class B - Philosophy, Psychology, Religion

Class C - Auxillary Sciences of History

Class D - World History and History of Europe, Asia, Africa, Austrlia, New Zealand, etc.

Class E - History of the Americas

Class F - Local History of the Americas

Class G - geography, Anthropology, Recreation

Class H - Social Sciences

Class J - Political Science

Class K - Law

Class L - Education

Class M - Music

Class N - Fine Arts

Class P - Language and Literature

Class Q - Science

Class R - Medicine

Class S - Agriculture

Class T - Technology

Class U - Military Science

Class V - Naval Science

Class Z - Bibliography, Library Science

Dewey Decimal Classification

The Dewey Decimal Classification system (DDC):

000 - Computer Science, information, and general works

005.8 - Computer security

005.82 - Digital rights management, electronic signatures

069.50288 - Maintenance and repair

100 - Philosophy and psychology

155.40862 - People by social and economic levels

155.4 - Child psychology

200 - Religion

220.3 - Dictionaries and encyclopedias

220.4 - Concordances

300 - Social Sciences

302.231 - Digital media

302.232 - Print media

305.4 - Women

320.409 - History and biography

332.32 - Savings and loan associations (variant names: building and loan associations, building societies, home loan associations, mortgage institutions)

343.014 - Discipline and conduct

- 343.0140269 - Courts and procedure
- 344.054 - Matters concerning public morals and customs
- 353.13263 - Foreign Service
- 362.16 - Extended care medical facilities
- 362.27 - Gambling as a social problem
- 364 - Criminology
 - 370.15 - Educational psychology
 - 371.192 - Parent-school relations
- 391 - Costume and personal appearance
- 400 - Language
- 500 - Pure Science
 - 523.48 - Neptune (former heading: Trans-Neptunian planets)
 - 577.639 - Salt lake ecology
 - 577.69 - Saltwater wetland and seashore ecology
 - 577.7 - Marine ecology (including saltwater ecology)
 - 588.2 - Bryopsida
 - 593.55 - Hydrozoa
 - 597.56 - Salmon
 - 597.7 - Australian salmon
- 600 - Technology
 - 623.746 - Heavier-than-air aircraft
 - 641.815 - Breads and bread-like foods
 - 641.7 - Specific cooking processes and techniques
- 700 - Arts and recreation

796.817 - Kickboxing

800 - Literature

900 - History and geography

T1 - Standard Subdivisions

T2 - Geographic Areas, Historical Periods, Biography

T2-4115 - Highland (Scottish Highlands)

T2-755816 - Alleghany County

T3 - Subdivisions for the Arts, for Individual Literatures, for Specific Literary Forms

T3A - Subdivisions for Works by or about Individual Authors

T3B - Subdivisions for Works by or about More than One Author

T3C - Notations to Be Added Where Instructed in Table 3B, 700.4, 808-809

T4 - Subdivisions of Individual Languages and Language Families

T5 - Ethnic and National Groups

T6 - Languages

definition

definition

summary

This chapter looks at definitions.

The first rule of philosophy is to define your terms. The reason is to create clarity and make sure that everyone is discussing the same thing.

Churchill

There is a famous example from World War II. In American use, the term “table” means to put a matter aside. In the rest of the English-speaking world, the term “table” means to begin discussion on a matter.

Winston Churchill describes how this became a source of confusion during World War II in his book *The Second World War, Volume 3: The Grand Alliance*.

The enjoyment of a common language was of course a supreme advantage in all British and American discussions. ... The British Staff prepared a paper which they wished to raise as a matter of urgency, and informed their American colleagues that they wished to “table it.” To the American Staff “tabling” a paper meant putting it away in a drawer and forgetting it. A long and even acrimonious argument ensued before both parties realized that they were agreed on the merits and wanted the same thing.

dictionaries

Why not just use a dictionary?

Dictionaries serve a different purpose. The definitions in dictionaries are about words. The definitions in philosophy are about concepts.

Even though we have a different purpose for definition in critical reasoning, a dictionary

definition can be a good starting point for coming up with a useful philosophical definition.

A **Webster's** style dictionary (there are many different brands, not one single version) attempts to record how the common person uses the language. The first was Noah Webster's 1928 edition of the *American Dictionary of the English Language*.

An **authoritative** dictionary attempts to record expert use of the language (such as the works of great writers). Originally authoritative dictionaries recorded how the king or queen wanted the language to be used. The famous example is the *Oxford English Dictionary*, which is printed on behalf of British royalty.

A **lexicon** is a specialized dictionary that records the words and phrases for a particular use, such as a law or science dictionary. The famous example is *Black's Law Dictionary*.

boundaries

One of the most important aspects of a good definition is setting boundaries. A definition divides the universe into that which fits the definition and that which doesn't fit the definition.

It is generally easy to deal with cases that are clearly within a definition and cases that are clearly outside of a definition. The problem is dealing well with the cases that are near the borders. In computer science, these are sometimes called the "corner cases".

precision and accuracy

Precision is how exacting something is. For example, 3.14159 is more precise than three.

Accuracy is how correct something is.

The classic example is:

" $2 + 2 = 3.9999$ " is very precise, but inaccurate.

"Two plus two is less than ten" is accurate, but imprecise.

We want any definition to be accurate.

There are always degrees of precision. In philosophy we want to be as precise as necessary. We want to be precise enough to avoid confusion, but have no need to go to extremes for precision's own sake.

clarity

The basic function of a definition in critical reasoning is to be clear. Our goal is to avoid confusion.

Working towards great clarity in definitions actually helps us better understand the topics we are thinking about.

In the last half century or so there has been a lot of work on how language and words powerfully control our thoughts and even what we are able to think of.

summary

A good definition should summarize the concept.

genus and differentia

A classic test of a good definition for critical reasoning is that it includes a genus and a differentia.

The genus let's us know the class of concepts.

The differentia (difference) let's us know how this particular concept difefrs from other similar concepts.

In normal speech it is common to leave the genus implied. For good critical reasoning, it is important to actually state the genus.

In some cases the genus is essential for distinguishing between multiple meanings of a word.

classical logic

classical logic

summary

This chapter looks at classical or Aristotelian logic.

Aristotle was a Greek philosopher and scientist who lived from 384 to 322 B.C.E. in Athens, Greece. He was a pupil of Plato, who in turn was a pupil and friend of Socrates.

logical argument

Aristotle claimed that all logical argument could be reduced to two premises (a major premise and a minor premise) and a conclusion.

three laws

Aristotle created three basic laws or principles of logical reasoning:

1. **The principle of identity**
A thing is itself: A is A .
2. **The principle of the excluded middle**
A proposition is either true or false: either A or $not A$.
3. **The principle of contradiction**
No proposition can be both true and false: A cannot be both A and $not A$.

Note that the third rule is called both the principle of contradiction and the principle of noncontradiction.

engineering

engineering

summary

This chapter looks at engineering.

engineering method

There are numerous variations of the engineering method. There is no official version. Most have four steps, although five and six step versions also exist. In general, all of the versions include the same basic stuff, but divide it up differently or express it differently.

1. Define problem.
2. Brainstorm solutions.
3. Evaluate and choose one method
4. Plan implementation

1. The first step is to identify the actual problem that is being solved. The vast majority of projects, especially those created by government or business, start instead with a statement of a particular solution.

In engineering, it is best to start with a clear, neutral definition of the problem that must be solved.

2. The second step is to look at all possible solutions. This includes examining the existing record to see how others have solved the same or similar problems.

3. The third step is to evaluate the risks, benefits, costs, advantages, and disadvantages of the possible solutions and determine which solution best meets the needs and budget.

4. The fourth and final step is to come up with a plan to implement the solution. In computer science, this centers on the software design.

Boolean algebra and logic

Boolean algebra and logic

summary

This section needs repair. I have the last PDF created, but my source files were stolen. Unfortunately, Adobe Acrobat does a horrible job of converting a PDF back into HTML (the source I use to create the book you are looking at now). It will take substantial time to repair these chapters.

what if language

This section is a historical what if.

overview of thought experiment

What if we could have designed a high quality programming language that was released in the early days of computing and that with time-appropriate extensions stood the test of time and remained useful to the present?

This is not as simple as it may seem at first.

Neither FORTRAN nor COBOL includes pointers. Pointers existed in assembly language and object code, but weren't available in high level languages until PL/I.

The first COBOL standard was in 1959, with the first version available in 1960. COBOL was rolled out over 1960, 1961, 1963, and 1965 standards. The reason was that no manufacturer could reasonably release a full COBOL compiler right away. It took six years to create the code as well as advances in the underlying hardware before the entire original specification was rolled out.

While some early languages (such as BASIC, COBOL, and PL/I) still have some use in maintaining legacy systems, only LISP and FORTRAN remain strong languages in their respective fields (LISP primarily in AI and FORTRAN primarily in scientific use of super computers). And FORTRAN sucks — which you would know if you ever wrote production software in it.

FORTRAN was accepted and was the overwhelming dominant language for more than a decade for one and only one reason: it produced compiled code nearly as efficient as hand assembly.

The creators of FORTRAN had seen well designed languages fail because they were too slow for extremely expensive primitive early computers. They knew that compiled languages would only be accepted if they produced fast object code.

Therefore they put all of their efforts into optimizing for efficient code. Many of their ideas are still in use and the efficiency of FORTRAN I far exceeds any modern compiler.

Unfortunately they ignored language design and FORTRAN was a nightmare for coding. I wrote professional FORTRAN software. Anyone who wrote FORTRAN code can verify this.

LISP was a great language, but a surprising number of people rejected it because they didn't like counting parenthesis.

COBOL suffered from being way too wordy and for emphasizing features of operating systems that disappeared into history. The creators of COBOL honestly thought that they were creating a programming language that any business person would be able to write code with. After a few years of reality, that goal was changed to making programs that any business person could read and verify that the program accurately reflected business needs. Even that goal wasn't true.

BASIC was relatively easy to use and lasted a surprisingly long time, both as a hobbyist language and surprisingly sometimes as a professional language. BASIC was cleaner than FORTRAN, but suffered from some of the drawbacks of FORTRAN.

PL/I was an attempt to combine both FORTRAN and COBOL as well as include some ideas that had been developed later, such as pointers and stacks. It had some new problems of its own, but its biggest problem was it was perceived as an IBM-only language.

APL was a very efficient and terse language. Its big problem was it required a special keyboard. It was briefly popular two different times because it allowed those with a strong mathematics background to quickly write one-off programs to solve some mathematical problem.

C is an extremely influential language. Most modern languages have C as one of their major influences, directly or indirectly through other languages. C did (and still does) have some key problems, especially for implementation on computers where the natural word size was not a multiple of the natural character size and for processors of less than eight bits.

C++, Objective C, and other object oriented extensions of C show how messy things can get when trying to cram new ideas into an established language.

In our thought experiment, we somehow can go back in time and introduce a programming language that is orderly and can over time easily and comfortably accept new ideas.

Our thought experiment is limited by the concern of the original FORTRAN team: each version of our proposed language has to be efficiently implemented on the hardware of the time.

We can have the plans for the series of versions mapped out in advance.

LISP was originally proposed in a 1960 paper by John McCarthy. McCarthy had been experimenting with ideas for LISP in 1958. To McCarthy's surprise, Steve Russell implemented the LISP eval function in IBM 704 machine code.

Our thought experiment is: how would we map out the evolution of one single coherent

programming language in a manner where each version can efficiently be run on the hardware for each version’s own time period.

The rules to this thought experiment:

- (1) We can introduce parts of the language over time. We are allowed to take into account how computing changes over time and make sure from the beginning that our language will continue to make sense at each step of the way and that new parts will fit smoothly with old parts.
- (2) We can’t introduce anything until the technology reasonably supports the things we introduce. This will be the most difficult in the first two to four decades of computing (depending on when you view the first version as coming into existence).
- (3) We can’t throw away any parts once they are introduced. The entire language must remain backwards compatible.

overview of thought experiment
history
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dynamic storage
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enumeration types
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order of evaluation
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expression statements
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interative statements and iterators
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return statements
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functions
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methods
lambdas
input statements
output statements
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generic units
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operations
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tasks
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remote procedure call
rendezvous
virtualmachines
low-level programming
standard library
standard language additions
character processing functions
string processing functions
memory functions
input output functions
storage allocation functions
mathematical functions
time and date functions
control functions
miscellaneous functions

history

a quick history

For those who didn't live through the early days of computing, let me provide you with one example of the severity of constraints of early computing:

In the early 1960s 1401 FORTRAN (which came between the unreleased FORTRAN III and FORTRAN IV) for the IBM 1401 computer used a 63-pass compiler. This compiler required 8000 character of core memory (six bits each). It could be run from magnetic tape or from a 2200-card deck. Once started, it used no external memory (other than reading in the code for the next passes of the compiler from tape, cards, or disk storage). The compiler was loaded in a series of overlays (software running consecutively in the same memory locations) and gradually transformed the data in memory.

At the time not all computers had 8000 memory bytes as an option and for those that did have that much or memory, it was very expensive. The magnetic cores had to be hand sewn by (mostly) women working under powerful magnification.

The FORTRAN II compiler had 29 passes, requiring 4K of memory and additional removable cartridge disks totalling 5 megs.

Donald Knuth's personal notes, now digitized and available online, are filled with discussions by early compiler writers (well into the 1960s) about how they had to severely limit the number of language keywords to leave room for also storing variables from programs being compiled.

LISP couldn't reasonably be used (other than for John McCarthy's experiments) for a couple of years until someone figured out a clever scheme that made efficient evaluation of LISP possible.

I hope this gives you some idea of the severe limitations for the first releases of this what if language.

early assemblers

Maurice Wilkes and W. Renwick created an assembler called Initial Orders that ran on the

EDSAC (Electronic Delay Storage Automatic Calculator) at Cambridge University.

source code

input

Source code can come from files, cards, tapes (paper or magnetic), or some kind of keyboard or terminal.

When the source code is input from files, cards, tapes (paper or magnetic), or some other storage, the program can be either interpreted or compiled.

When the source code is input from some kind of keyboard or terminal, it is an interactive session and each line is immediately interpreted unless the interactive session is in an editing mode.


source code representation


Source code is Unicode text encoded in UTF-8. The text is not canonicalized, so a single accented code point is distinct from the same character constructed from combining an accent and a letter; those are treated as two code points. For simplicity, this document will use the unqualified term character to refer to a Unicode code point in the source text. — [The Go Programming Language Specification](#)

Each code point is distinct; for instance, upper and lower case letters are different characters. — [The Go Programming Language Specification](#)

Implementation restriction: For compatibility with other tools, a compiler may disallow the NUL character (U+0000) in the source text. — [The Go Programming Language Specification](#)

Implementation restriction: For compatibility with other tools, a compiler may ignore a UTF-8-encoded byte order mark (U+FEFF) if it is the first Unicode code point in the source text. A byte order mark may be disallowed anywhere else in the source. — [The Go Programming Language Specification](#)

The UTF-8 standard recommends replacing each error (which for this language will include the UTF-8-encoded byte order mark (U+FEFF) (other than as the first Unicode code point in the source text) with the replacement character “” (U+FFDD). When in edit mode, it will be represented by the replacement character, but the original will be preserved unless changed by

the user, and the user can examine to see what the underlying data is. Any UTF-8 errors that result in the replacement character “” (U+FFDD) are ignored. If the remaining text is valid, the program will continue to be interpreted or compiled. — [The Go Programming Language Specification](#)

source code format

Portions of this document are provided here. Use the link to view and read the entire document.

NOTE: This document was released almost a year *before* the language was released.

From the [IBM Programmer's Reference Manual FORTRAN Automatic Coding System for the IBM 704](#):

Keypunching the Program

Each statement is punched on a separate card. If a statement is too long to fit on a single card it can be continued over as many as 9 additional *continuation* cards. For each statement the initial card must contain either a zero or blank in column 6; on continuation cards column 6 must not contain a zero or blank, and it should be used to number the continuation cards consecutively from 1 to 9.

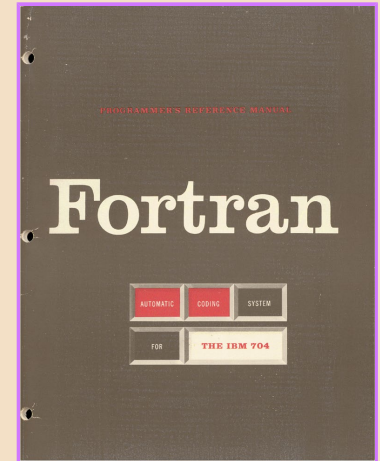
If a statment is too long to fit on a single line of the coding form, the programmer can signal to the keypuncher that he has continued on to the next line by placing a mark in the column labeled CONTINUATION.

The order of the statements is governed solely by the order of the cards. However, any number less than 2^{15} (=32768) may be associated with any statement by punching it in columns 1-5 of the initial card bearing that statemet. Thereupon this number becomes the *statement number* of that statement. Statement numbers, besides permitting cross-references within the source code, also help the programmer to correlate the object program with his source code.

Punching the character C in column 1 will cause the card to be ignored by FORTRAN. Such cards may therefore be used to carry comments which will appear when the deck is listed.

Columns 73-80 are not read by FORTRAN and may be punched with any desired identifying information.

The statements themselves are punched in columns 7-72, both on initial and continuation cards. Thus a statement consists of not more than $10 \times 66 = 660$ characters. A table of the



admissible characters in FORTRAN is given in Appendix A.

Blank characters, except in column 6, are simply ignored by FORTRAN, and the programmer may use blanks freely to improve the readability of his FORTRAN listing.

Source code format is free form.

The first line of the source code can be a UNIX/Linux-style shebang "#!" followed by the location of the compiler/interpreter.

If a line of the source code includes the command `CARD COLUMN` followed by card column ranges, for the rest of the source code, the designated columns are reserved for sequence numbers and are ignored, including the line with that command. The command can not extend into the designated card sequence columns. If the command extends into designated card sequence columns, it is a fatal error.

If a line of the source code includes the command `COMPILE` followed by any options, the source code will be compiled.

If a line of the source code includes the command `INTERPRET` followed by any options, the source code will be interpreted.

If there is a procedure with the option `MAIN` (case insensitive), the program will begin executing with that procedure.

If there is a function named `main` (case insensitive), the program will begin executing with that function.

A single program with both a main procedure and a main function is a fatal error.

In all other cases, the program will begin executing at the beginning of the source code. Functions and procedures are not run until they are called elsewhere.

program structure

A PL/I program consists of one or more blocks of statements called procedures. A procedure may be thought of as a subroutine. Procedures may invoke other procedures, and these procedures or subroutines may either be compiled separately, or may be nested within the calling procedure, and compiled with it. Each procedure may contain declarations that define names and control the allocation of storage. — *IBM System/360 Operating System PL/I (F) Language Reference Manual*

identifiers

Identifiers are sequences of letters, digits, and underscores. The first character must be a letter. Case is important; e.g, `CS`, `Cs`, `cS`, and `CS` are all different identifiers. — *The SR Programming Language*

keywords

Keywords are special identifiers, such as `if` and `do`, whose meaning is fixed in the language.

— *The SR Programming Language*

literals

Literals are specific values of different types, such as booleans, integers, reals, characters, and strings. — *The SR Programming Language*

Integer literals are unsigned sequences of digits. Decimal numbers are sequences of 0-9. Octal numbers are sequences of 0-7 followed by `q` or `Q`. Hexadecimal numbers are sequences of 0-9, a-f, or A-F, followed by `x` or `X`; hexadecimal numbers must begin with a digit. All numbers specify the least significant bits of the literal; unspecified bits are set to 0. Some examples of integer literals are — *The SR Programming Language*

`11``4096``1333Q``0abcdefX`

constants

constants

constants

operators and separators

Operators and separators are keywords or special characters, such as `<=` or `[]`. — *The SR Programming Language*

The integer operators include arithmetic operators, such as `+`, `**`, `%` (remainder), and `mod`; bit-wise operators, such as `and` and `or`; and bit-shifting operators, such as `>>` (right shift). Each operator returns an integer result. — *The SR Programming Language*

white space

White space — blanks or tabs — may appear between any two tokens. It is ignored unless it is essential to separate two tokens, such as a keyword followed by an identifier. — *The SR Programming Language*

new lines

Newline character, too, can sometimes be used as white space. However, they can also indicate the end of a declaration, statement, or expression. When a newline character is encountered, its rule is determined by following rule: If the previous token can legally terminate a declaration, estatement, or expression — and if the following token can legally begin one — then the newline acts as a separator; otherwise it is ignored. For example, consider the following program fragment: — *The SR Programming Language*

```
x := 10 +
    3
```

It consists of a single assignment, assigning 13 to **x**. In contrast consider: — *The SR Programming Language*

```
x := 10
    + 3
```

This consists of two expressions: the first assigns 10 to **x**, and the second just evaluates the expression **+ 3**. To rewrite the original example with the **+** on the second line, an explicit line continuation, denoted by ****, is placed at the end of the line to be continued, as in — *The SR Programming Language*

```
x := 10 \
    + 3
```

In addition to newline characters, semicolons can be used to terminate declarations, statements, or expressions. Semicolons also appear in the SR grammar in a few places, such as between field definitions in a record. Semicolons can *always* be replaced by newline characters. — *The SR Programming Language*

comments

SR provides two different kinds of comments. In Chapter 1, we used a one-line comment, which begins with `#` and ends at the next newline character (or the end of the file). The second kind of comment is a bracketed comment, which begins with `/*` and ends with the corresponding occurrence of `*/`. Bracketed comments can appear within a line, or they can span more than one line. Bracketed comments can also be nested; otherwise all characters within a comment are ignored until the end of the comment is reached. For example, `#` is ignored within a bracketed comment. — *The SR Programming Language*

preprocessor

preprocessor

preprocessor

declarations

declarations

declarations

types

types

types

SR has five basic types: boolean, integer, real, character, and string. They are represented by keywords `bool`, `int`, `real`, `char`, and `string`, respectively, — *The SR Programming Language*

symbols

symbols

symbols

logical types

boolean types

logical types or boolean types

The boolean type has two literals: `false` and `true`. The boolean operators are `and`, `or`, `xor` (exclusive or), and `not`. Each operator returns a boolean result. — *The SR Programming Language*

Evaluation of boolean expression is *short-circuit*: evaluation stops as soon as the final value of the expression can be determined. In particular, evaluations of `and` and `or` are short-circuit. For example, if `and`'s first operand evaluates to false, its second operand is not evaluated because the entire expression is known to be false. Similarly, if `or`'s first operand evaluates to true, its second operand is not evaluated because the entire expression is known to be true. — *The SR Programming Language*

numeric types

numeric types

The numeric types in IEEE:

IEEE Standard 754 specifies three types or formats for floating-point numbers.

- Single (Fortran REAL*4 or C float)
- Double (Fortran REAL*8 or C double)
- Double-Extended (Fortran REAL*10+ or C long double)

There is also a Quadruple-Precision format, which is not part of the standard, but does appear on some processors.

The numeric types in SQL:

Exact numeric types, values where the precision and scale need to be preserved.

The exact numeric types are INTEGER, BIGINT, DECIMAL, NUMERIC, NUMBER, and MONEY.

Approximate numeric types, values where the precision needs to be preserved and the scale can be floating. The approximate numeric types are DOUBLE PRECISION, FLOAT, and REAL.

The numeric types in Ada:

Numeric Type Declarations - General Forms	
Integer Types (signed)	<pre> type My_Integer_Type is range Low .. High; -- where Low and High are integers -- (negative, zero or positive) </pre>
	<pre> type My_Modular_Type is mod M; </pre>

Integer Types (modular aka unsigned)	<pre>-- where M (modulus) is a positive integer -- example: type Hours is mod 24; -- example: type Minutes is mod 60;</pre>
Floating-Point Types	<pre>type My_Float_Type is digits D range Low .. High; -- where D is a positive integer, -- Low and High are real numbers, and -- the range constraint is optional</pre>
Fixed-Point Types (regular)	<pre>type My_Fixed_Type is delta P range Low .. High; -- P, Low and High are real numbers and -- P (precision) is positive</pre>
Decimal Types (available only if Annex F conformance is claimed)	<pre>type My_Decimal_Type is delta P digits D range L .. H; -- where D is a positive integer, -- P, L and H are real numbers, and -- P is a power of ten (such as 0.01)</pre>

integer types

integer types

Integer literals are unsigned sequences of digits. Decimal numbers are sequences of 0-9. Octal numbers are sequences of 0-7 followed by `q` or `Q`. Hexadecimal numbers are sequences of 0-9, `a-f`, or `A-F`, followed by `x` or `X`; hexadecimal numbers must begin with a digit. All numbers specify the least significant bits of the literal; unspecified bits are set to 0. Some examples of integer literals are — *The SR Programming Language*

11 4096 1333Q 0abcdefX

The integer operators include arithmetic operators, such as `+`, `**`, `%` (remainder), and `mod`; bit-wise operators, such as `and` and `or`; and bit-shifting operators, such as `>>` (right shift). Each operator returns an integer result. — *The SR Programming Language*

The modulo and remainder operators are related in that they both return a result that represents the remainder from the division of their two operands. However, they differ in exactly what they return. The sign of `a mod b` is that of `b`, while the sign of `a % b` depends on how integer division is performed on the underlying machine. For example, consider a circular buffer of size `n` with slots numbered `0, 1, ..., n-1`. The two slots adjacent to slot `i` have the indices `(i + 1) mod n` and `(i - 1) mod n`. When `i` is zero, the value of the last expression is `n - 1`, whereas the value of `(i - 1) % n` can be either `n - 1` or `-1`. Accordingly, the modulo operator is generally more useful than the remainder operator. — *The SR Programming Language*

A number of predefined functions—such as `abs` and `max`—can be applied to integers. — *The SR Programming Language*

8 bit integer types

integer types: 8 bit (byte)

integer types: 8 bit signed (byte)

Ada: range $-2^{**7} \dots 2^{**7} - 1$ Ada range types are checked for boundary violations at run-time (as well as at compile-time for static expressions). Run-time boundary violations raise a “constraint error” exception. Ranges are not restricted to powers of two. Runtime checks can be disabled if performance is more important than integrity checks. [Wikipedia](#)

ALGOL 68(variable-width): `short short int` The ALGOL 68 language does not specify the exact width of the integer types `short` and `int`. [Wikipedia](#)

C (C99 fixed-width): `int8_t`

C (C99 variable-width): `signed char`.

C#: `sbyte`

C++ (C++11 fixed-width): `int8_t`

C++ (C++11 variable-width): `signed char` The C++ language does not specify the exact width of the integer type `int`. [Wikipedia](#)

COBOL: `BINARY-CHAR` COBOL allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “`PIC S9999`”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

COBOL: `BINARY-CHAR SIGNED COBOL` allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “`PIC S9999`”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

Common Lisp: `(signed-byte 8)`

D: `byte`

Eiffel: `INTEGER_8`

F#: `sbyte`

Fortran: `INTEGER (KIND = n)` The value of `n` is provided by the `SELECTED_INT_KIND` intrinsic function. [Wikipedia](#)

FreeBasic: `Byte`

FreeBasic: `Integer<8>`

Go: `int8`

Haskell (GHC): `import Int`

Haskell (GHC): `Int8`

Java: `byte`

Objective-C (Cocoa): `signed char`

Objective-C (Cocoa): `int8_t`

Pascal (FPC): `shortint`

Perl 5: Perl 5 does not have distinct types. Integers, floating point numbers, strings, etc. are all considered “scalars”. [Wikipedia](#)

Raku: `int8`

Rust: `i8`

Scala: `Byte`

Swift: `Int8`

Visual Basic .NET: `SByte`

integer types: 8 bit unsigned (byte)

Ada: range 0 .. 2**8 - 1 Ada range types are checked for boundary violations at run-time (as well as at compile-time for static expressions). Run-time boundary violations raise a “constraint error” exception. Ranges are not restricted to powers of two. Runtime checks can be disabled if performance is more important than integrity checks. [Wikipedia](#)

Ada: mod 2**8 Ada modulo types implement modulo arithmetic in all operations, i.e. no range violations are possible. Modulos are not restricted to powers of two. [Wikipedia](#)

C (C99 fixed-width): uint8_t

C (C99 fixed-width): unsigned char

C#: byte

C++ (C++11 fixed-width): uint8_t

C++ (C++11 variable-width): unsigned char

COBOL: BINARY-CHAR UNSIGNED COBOL allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “PIC S9999”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

Common Lisp: (unsigned-byte 8)

D: ubyte

Eiffel: NATURAL_8

F#: byte

FreeBasic: UByte

FreeBasic: UInteger<8>

Go: uint8

Go: byte

Haskell (GHC): import Word

Haskell (GHC): Word8

Objective C (Cocoa): unsigned char

Objective C (Cocoa): `uint8_t`

Pascal (FPC): `byte`

Raku: `uint8`

Rust: `u8`

Standard ML: `Word8.word`

Swift: `UInt8`

Visual Basic: `Byte`

Visual Basic .NET: `Byte`

16 bit integer types

integer types: 16 bit (short integer)

integer types: 16 bit signed (short integer)

Ada: range $-2^{15} \dots 2^{15} - 1$ Ada range types are checked for boundary violations at run-time (as well as at compile-time for static expressions). Run-time boundary violations raise a “constraint error” exception. Ranges are not restricted to powers of two. Runtime checks can be disabled if performance is more important than integrity checks. [Wikipedia](#)

ALGOL 68(variable-width): `short int` The ALGOL 68 language does not specify the exact width of the integer types `short` and `int`. [Wikipedia](#)

C (C99 fixed-width): `int16_t`

C (C99 fixed-width): `short` The C language does not specify the exact width of the integer types `short` and `int`. [Wikipedia](#)

C#: `short`

C++ (C++11 fixed-width): `int16_t`

C++ (C++11 variable-width): `short` The C++ language does not specify the exact width of the integer types `short` and `int`. [Wikipedia](#)

COBOL: `BINARY-SHORT` COBOL allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “PIC S9999”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

COBOL: `BINARY-SHORT SIGNED` COBOL allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “`PIC S9999`”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms.

[Wikipedia](#)

Common Lisp: `(signed-byte 16)`

D: `short`

Eiffel: `INTEGER_16`

F#: `int16`

Fortran: `INTEGER (KIND = n)` The value of `n` is provided by the `SELECTED_INT_KIND` intrinsic function. [Wikipedia](#)

FreeBasic: `Short`

FreeBasic: `Integer<16>`

Go: `int16`

Haskell (GHC): `import Int`

Haskell (GHC): `Int16`

Java: `short`

Objective-C (Cocoa): `short`

Objective-C (Cocoa): `int16_t`

Pascal (FPC): `smallint`

Raku: `int16`

Rust: `i16`

Scala: `Short`

Swift: `Int16`

Visual Basic: `Integer`

Visual Basic .NET: `Short`

integer types: 16 bit unsigned (short integer)

Ada: range 0 .. 2**16 - 1 Ada range types are checked for boundary violations at run-time (as well as at compile-time for static expressions). Run-time boundary violations raise a “constraint error” exception. Ranges are not restricted to powers of two. Runtime checks can be disabled if performance is more important than integrity checks. [Wikipedia](#)

Ada: mod 2**16 Ada modulo types implement modulo arithmetic in all operations, i.e. no range violations are possible. Modulos are not restricted to powers of two. [Wikipedia](#)

C (C99 fixed-width): uint16_t

C (C99 fixed-width): unsigned short The C language does not specify the exact width of the integer types short and int. [Wikipedia](#)

C#: ushort

C++ (C++11 fixed-width): uint16_t

C++ (C++11 variable-width): unsigned short The C++ language does not specify the exact width of the integer types short and int. [Wikipedia](#)

COBOL: BINARY-SHORT UNSIGNED COBOL allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “PIC S9999”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

Common Lisp: (unsigned-byte 16)

D: ushort

Eiffel: NATURAL_16

F#: uint16

FreeBasic: UShort

FreeBasic: UInteger<16>

Go: uint16

Haskell (GHC): import Word

Haskell (GHC): Word16

Java: char

Objective-C (Cocoa): unsigned short

Objective-C (Cocoa): uint16_t

Pascal (FPC): word

Raku: uint16

Rust: u16

Scala: Char

Swift: UInt16

Visual Basic .NET: UShort

32 bit integer types

integer types: 32 bit

integer types: 16 bit signed (short integer)

Ada: range $-2^{31} \dots 2^{31} - 1$ Ada range types are checked for boundary violations at run-time (as well as at compile-time for static expressions). Run-time boundary violations raise a “constraint error” exception. Ranges are not restricted to powers of two. Runtime checks can be disabled if performance is more important than integrity checks. [Wikipedia](#)

ALGOL 68(variable-width): `int` The ALGOL 68 language does not specify the exact width of the integer type `int`. [Wikipedia](#)

C (C99 fixed-width): `int32_t`

C (C99 fixed-width): `long` The C language does not specify the exact width of the integer types `long` and `int`. [Wikipedia](#)

C#: `int`

C++ (C++11 fixed-width): `int32_t`

C++ (C++11 variable-width): `long` The C++ language does not specify the exact width of the integer types `long` and `int`. [Wikipedia](#)

COBOL: `BINARY-LONG` COBOL allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “PIC S9999”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

COBOL: `BINARY-LONG SIGNED COBOL` allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “`PIC S9999`”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

Common Lisp: `(signed-byte 32)`

D: `int`

Eiffel: `INTEGER_32`

F#: `int32`

F#: `int`

Fortran: `INTEGER (KIND = n)` The value of `n` is provided by the `SELECTED_INT_KIND` intrinsic function. [Wikipedia](#)

FreeBasic: `Long`

FreeBasic: `Integer<32>`

Go: `int32`

Haskell (GHC): `import Int`

Haskell (GHC): `Int32`

Java: `int`

Objective-C (Cocoa): `int`

Objective-C (Cocoa): `int32_t`

OCaml: `int32`

Pascal (FPC): `longint`

PHP: `int` `int` in PHP has the same width as `long` type in C has on that system. [Wikipedia](#)

Raku: `int32`

Rust: `i32`

Scala: `Int`

Standard ML: `Int32.int`

Swift: Int32

Visual Basic: Long

Visual Basic .NET: Integer

integer types: 16 bit unsigned (short integer)

Ada: range 0 .. $2^{32} - 1$ Ada range types are checked for boundary violations at run-time (as well as at compile-time for static expressions). Run-time boundary violations raise a “constraint error” exception. Ranges are not restricted to powers of two. Runtime checks can be disabled if performance is more important than integrity checks. [Wikipedia](#)

Ada: mod 2^{32} Ada modulo types implement modulo arithmetic in all operations, i.e. no range violations are possible. Modulos are not restricted to powers of two. [Wikipedia](#)

C (C99 fixed-width): uint32_t

C (C99 fixed-width): unsigned long The C language does not specify the exact width of the integer types long and int. [Wikipedia](#)

C#: uint

C++ (C++11 fixed-width): uint32_t

C++ (C++11 variable-width): unsigned long The C++ language does not specify the exact width of the integer types long and int. [Wikipedia](#)

COBOL: BINARY-LONG UNSIGNED COBOL allows the specification of a required precision and will automatically select an available type capable of representing the specified precision. “PIC S9999”, for example, would require a signed variable of four decimal digits precision. If specified as a binary field, this would select a 16-bit signed type on most platforms. [Wikipedia](#)

Common Lisp: (unsigned-byte 32)

D: uint

Eiffel: NATURAL_32

F#: uint32

FreeBasic: ULong

FreeBasic: UInteger<32>

GO: uint32

Haskell (GHC): import Word

Haskell (GHC): Word32

Objective-C (Cocoa): unsigned int

Objective-C (Cocoa): uint32_t

Pascal (FPC): longword

Raku: uint32

Rust: u32

Standard ML: Word32.word

Swift: UInt32

Visual Basic .NET: UInteger

real types

real types

A real (floating point) literal has the general form — *The SR Programming Language*

integer_part . *fraction_part* *exponent_part*

The three parts and decimal point are optional, subject to the following rule: Either the integer or fraction part must be present, and either the decimal point or the exponent part must be present; the decimal point must be present if the fraction part is present. The integer and fraction parts are sequences of decimal digits. The exponent part starts with **e** or **E**, has an optional sign, and ends with a sequence of decimal digits specifying a power. Some examples of real literals are — *The SR Programming Language*

11.2 3.1415927 0.0 0. .0
1.23e-43 1.23E-45 .123e-44 421e+3 421e3

The real operators are the same arithmetic operators as for integers. Each operator returns a real result. The comments regarding the modulo and remainder operators on integers also apply to their real counterparts. — *The SR Programming Language*

As with integers, a number of predefined functions—such as **abs** and **max**—can be applied to reals. Other predefined functions for reals include standard mathematical functions, such as **sin**, **log**, and **sqrt**.s — *The SR Programming Language*

complex types

complex types

complex types

character types

character types

Character values are represented using type `char`. Character literals are single ASCII characters enclosed in single quotes (apostrophes). In addition, character literals can contain the special characters shown in Table 2.1. Examples of character literals include — *The SR Programming Language*

```
'a' 'Z' '4' '\'' '\e' '\33' '\x1b'
```

The fourth literal is a single quote. The last three literals are all the escape (ESC) character: as a special character, i octal, and in hexadecimal. — *The SR Programming Language*

The character type has no type-specific operators, although characters can be concatenated to form strings. — *The SR Programming Language*

<code>\n</code>	newline (NL)	<code>\a</code>	alert (BEL)
<code>\t</code>	tab (HT)	<code>\e</code>	escape (ESC)
<code>\b</code>	backspace (BS)	<code>\v</code>	vertical tab (VT)
<code>\r</code>	return (CR)	<code>\f</code>	form feed (FF)
<code>\'</code>	single quote	<code>\"</code>	double quote
<code>\\</code>	backslash		
<code>\ooo</code>	bit patterns where <i>ooo</i> is 1-3 octal digits		
<code>\xhh</code>	bit pattern where <i>hh</i> is 1 or 2 hexadecimal digits		
<code>\c</code>	character <i>c</i> where <i>c</i> is any other character		

Table 2.1. Special characters

string types

character strings

Strings are sequences of zero or more ASCII characters enclosed in double quotes. String literals can also contain the special characters listed in Table 2.1. Examples of string literals are shown below; the first is the empty string. — *The SR Programming Language*

```
" " "alpha" "Z" "44"
"I'm having fun" "here is a \" in the middle"
```

The string type has one binary operator, `||`, for string concatenation. Each operand is either a string or a character. The result is a string that is the concatenation of the two operands. — *The SR Programming Language*

And implicit part of every string is the number of characters it holds. The declaration of a string variable must specify a maximum length, e.g., `string[20]`. The actual number of characters in a string variable can vary from zero up to the specified maximum. The predefined function `length(s)` returns the current number of characters in string `s`. The predefined function `maxlength(s)` returns the maximum number of characters in string `s`, e.g., the declared maximum length. For either function `s` can be a variable or an arbitrary string expression. The following table gives some examples of the values of these predefined functions, assuming `x` is a string variable declared as `string[20]`, and its current values is `"oscar"`. — *The SR Programming Language*

<i>expr</i>	<code>length (expr)</code>	<code>maxlength (expr)</code>
<code>"abc"</code>	3	3
<code>x</code>	5	20
<code>"abc" x</code>	8	8

The value of `length` and `maxlength` on a given expression will differ only when the expression is a single variable. — *The SR Programming Language*

bit strings

bit strings

relational operators and ordered types

relational operators and ordered types

Relational operators compare their operands and return a boolean value that reflects the result of the comparison. They are defined on reals, strings, and all *ordered* types. Of the basic types, booleans, characters, and integers are ordered types; that is, it makes sense to define an ordering among values in each of these types, *and* their successive values differ by a fixed amount. Reals and strings are not considered ordered types because adjacent values differ by a variable amount. However, orderings exist between their respective values so that reals and strings can be compared. Enumeration types, described later, are the only user-defined ordered types. — *The SR Programming Language*

The ordering among boolean values is that `false` precedes `true`. Among character values, the ordering is defined by the underlying bit representation treated as an unsigned integer. (Thus the ASCII ordering is preserved, although all eight bits of a byte can be used in a character.) The ordering of integer values by their numeric values; the same applies to real values. Strings are ordered lexicographically using their underlying character representation. The empty string is the smallest string. For example, the following strings are in increasing order: — *The SR Programming Language*

" " " "12" "123" "A" "a" "alpha" "beta"

The relations operators—which again may be used only on ordered types, reals, and strings—include the usual comparisons `=`, `!=`, `<`, `<=`, etc. Each operator is binary and returns a boolean result; its operands must be of the same type. The precedence of relational operators is above that of the boolean operators but below that of all other operators encountered thus far. Thus, expressions involving multiple relational operators can be written without requiring parenthesis (unlike in Pascal). For example, the following two boolean expressions are equivalent: — *The SR Programming Language*

`a < b and c > d` `(a < b) and (c > d)`

The relational operators `=` and `!=` are also defined for pointers and for capabilities. — *The SR Programming Language*

A number of predefined functions are useful in dealing with ordered types and reals. The function `min(x1,...)` returns the smallest value among its arguments; the function `max(x1,...)` returns the largest. Both `min` and `max` take one or more arguments of the same type. For example, `max('4', 'A', 'c')` returns `'c'`. For an ordered type `T`, the function `low(T)` returns the smallest value of type `T`; the function `high(T)` returns the largest. On a machine that stores integers in 32 bits using two's complement form, for example, `low(int)` is `-2147483648` and `high(int)` is `2147483647`. The values `low(real)` and `high(real)` return, respectively, the smallest and largest representable positive real numbers. Finally, for ordered types (but not reals), the function `pred(x)` returns `x`'s predecessor in the defined ordering; the function `succ(x)` returns `x`'s successor. For example, `pred(8)` is `7` and `succ('f')` is `'g'`. — *The SR Programming Language*

pictures and formats

pictures and formats

pictures and formats

pointer types

pointer types

pointer types

reference and dereference

reference and dereference

reference and dereference

access types

access types

access types

dynamic storage

dynamic storage

dynamic storage

vector types

vector types

vector types

matrix types

matrix types

matrix types

array types

array types

array types

From the [IBM Programmer's Reference Manual FORTRAN Automatic Coding System for the IBM 704](#):

The FORTRAN language is intended to be capable of expressing any problem of numerical computation. In particular, it deals easily with problems containing large sets of formulae and many variables, and it permits any variable to have up to three independent subscripts.

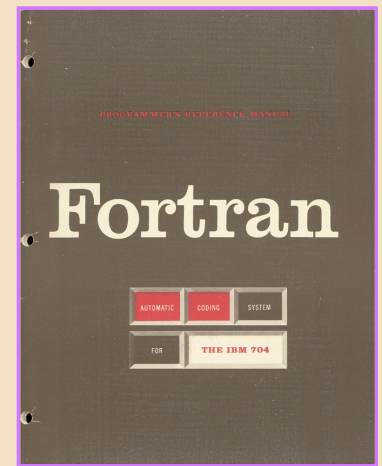


table types

table types

table types

ranges

ranges

ranges

enumeration types

enumeration types

enumeration types

tuples

tuples

tuples

sets

sets

sets

structure types

structure types

structure types

union types

union types

union types

record types with discriminants

record types with discriminants

record types with discriminants

hashes

hashes

hashes

lists

lists

lists

stacks

stacks

stacks

queues

queues

queues

dictionaries

dictionaries

dictionaries

objects

objects

objects

function types

function types

function types

void types

void types

void types

user defined types

user defined types

user defined types

files

files

files

scope and visibility

scope and visibility

scope and visibility

conversions

conversions

conversions

expressions

expressions

expressions

primary expressions

primary expressions

primary expressions

postfix expressions

postfix expressions

postfix expressions

unary expressions

unary expressions

unary expressions

binary expressions

binary expressions

binary expressions

logical operation expressions

logical operation expressions

logical operation expressions

logic assertions

logic assertions

logic assertions

conditional expressions

conditional expressions

conditional expressions

assignment expressions

assignment expressions

assignment expressions

sequential expressions

sequential expressions

sequential expressions

constant expressions

constant expressions

constant expressions

order of evaluation

order of evaluation

order of evaluation

statements

statements

statements

expression statements

expression statements

expression statements

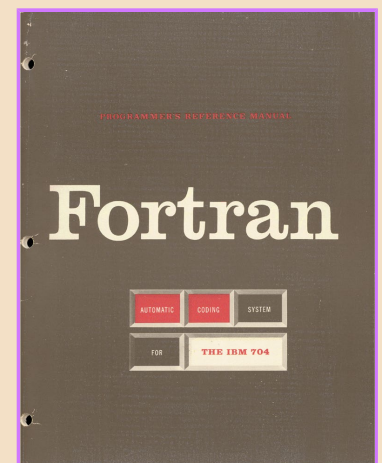
arithmetic statements

arithmetic statements

From the [IBM Programmer's Reference Manual FORTRAN Automatic Coding System for the IBM 704](#):

Nature of Fortran Arithmetic

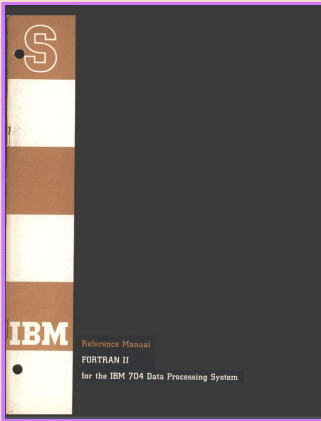
Arithmetic in the object progra will generally be performed with single-precision 704 floating point numbers. These numbers provide 27 binary digits (about 8 decimal digits) of precisionn, and may have magnitudes between approximately 10^{-38} and 10^{38} , and zero. Fixed point arithmetic, but for integers only, is also provided.



Portions of this document are provided here. Use the link to view and read the entire document.

From the [IBM Reference Manual FORTRAN II for the IBM 704 Data Processing System](#):

As in the previous FORTRAN system, there are two kinds of arithmetic statements. The terms used in previous FORTRAN literature



for the two kinds of arithmetic statements are arithmetic formula and function statement. To avoid confusion of terms, the second kind of arithmetic statement will be referred to subsequently in this manual as a function definition.

The formal description of the function definition is as follows:

General Form	Examples
"a=b" where a is a function name followed by parenthesis enclosing its arguments (which must be distinct non-subscripted variables) separated by commas, and b is an expression which does not involve subscripted variables. The function name on the left side of the function definition consists of 4 to 7 alphabetic or numeric characters (not special characters), of which the last must be F and the first must be alphabetic. Also, the first must be X if and only if the value of the function is to be fixed point. Any functions appearing on the right side must be built-in, or available on the library tape, or already defined by preceding function definitions, or defined by a function subprogram.	<div>FIRSTF(X) = A*X + B</div> <div>SECONDF(X,B) = A*X + B</div> <div>THIRDF(D) = FIRSTF(E)/D</div> <div>FOURTHF(F, G) = SECONDF(F, THIRDF(G))</div> <div>FIFTHF(I, A) = 3.0*A**I</div> <div>SIXTHF(J) = J + K</div> <div>XSIXTHF(J) = J + K</div>

labeled statements

labeled statements

labelled expressions

blocks

blocks

Blocks of code are indicating either by the keywords `begin` and `end` (case insensitive) or the pair of special character braces `{` and `}`.

`BEGIN`, `begin`, `END`, and `end` statements end with a semicolon `:`. Options and names can optionally follow the `begin` and `end` keywords.

An `end` keyword can be optionally followed by the designation of the block kind, such as `case`, `do`, `for`, `else`, `if`, `loop`, `switch`, `until`, or `while`. This is for documentation purposes, but if the block kind is the incorrect one being ended, it is a fatal error.

A `begin` or `end` (case insensitive) keyword can be optionally followed by a name. This is the name of the block. In the case of an `end` the name can be preceded by the correct keyword from the previous paragraph. In the case of an `end`, if there were any intervening blocks that had not yet been terminated, it is a fatal error. If the special keyword `all` is used as the name (`end all`), then all currently unended blocks are ended. If the special keyword `all` is used as the name after one of the block kinds (`end all`), then all currently unended blocks of that kind are ended (`end loop all`).

Options can optionally be placed after both any block kind and any block name.

Any text that follows the above options (block type, block name, and block options) until the first semicolon or newline is a comment.

A code block, including all the source code between the `begin` and `end` or `{` and `}` is considered a compound statement and can appear anywhere a statement is allowed.

compound statements

compound statements

compound statements

conditional statements

conditional statements

conditional statements

loops

loops

loops

iterative statements and iterators

iterative statements and iterators

iterative statements and iterators

case statements

case statements

case statements

break and continue statements

break and continue statements

break and continue statements

return statements

return statements

return statements

goto statements

goto statements

goto statements

low-level statements

low-level statements

Low-level statements interact with the hardware and low level data structures and the operating system kernel.

null statements

null statements

null statements

conditions

conditions

conditions

exceptions

exceptions

exceptions

errors

error

The language definition classifies errors into several different categories: — [Ada Reference Manual 1.1.5](#)

Errors that are required to be detected prior to run time by every Ada implementation; — [Ada Reference Manual 1.1.5](#)

Errors that are required to be detected at run time by the execution of an Ada program; — [Ada Reference Manual 1.1.5](#)

Bounded errors; — [Ada Reference Manual 1.1.5](#)

The language rules define certain kinds of errors that need not be detected either prior to or during run time, but if not detected, the range of possible effects shall be bounded. The errors of this category are called *bounded errors*. The possible effects of a given bounded error are specified for each such error, but in any case one possible effect of a bounded error is the raising of the exception `Program_Error`. — [Ada Reference Manual 1.1.5](#)

Erroneous execution. — [Ada Reference Manual 1.1.5](#)

In addition to bounded errors, the language rules define certain kinds of errors as leading to erroneous execution. Like bounded errors, the implementation need not detect such errors either prior to or during run time. Unlike bounded errors, there is no language-specified bound on the possible effect of erroneous execution; the effect is in general not predictable. — [Ada Reference Manual 1.1.5](#)

procedures

procedures

procedures

functions

functions

From the Wikipedia page on [Function \(computer programming\)](#)

In computer programming, a function or subroutine (when it doesn't return a value) is a sequence of program instructions that performs a specific task, packaged as a unit. This unit can then be used in programs wherever that particular task should be performed.

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recursion

recursion

From the Wikipedia page on [Recursion \(computer science\)](#)

In computer science, recursion is a method of solving a computational problem where the solution depends on solutions to smaller instances of the same problem. Recursion solves such recursive problems by using functions that call themselves from within their own code. The approach can be applied to many types of problems, and recursion is one of the central ideas of computer science.

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methods

methods

From the Wikipedia page on [Method \(computer programming\)](#)

A method in object-oriented programming (OOP) is a procedure associated with a message and an object. An object consists of state data and behavior; these compose an interface, which specifies how the object may be utilized by any of its various consumers. A method is a behavior of an object parametrized by a consumer.

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lambdas

lambdas

lambdas

From the Wikipedia page on [Anonymous function](#)

In computer programming, an anonymous function (function literal, lambda abstraction, lambda function, lambda expression or block) is a function definition that is not bound to an identifier. Anonymous functions are often arguments being passed to higher-order functions or used for constructing the result of a higher-order function that needs to return a function. If the function is only used once, or a limited number of times, an anonymous function may be syntactically lighter than using a named function. Anonymous functions are ubiquitous in functional programming languages and other languages with first-class functions, where they fulfil the same role for the function type as literals do for other data types.

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input statements

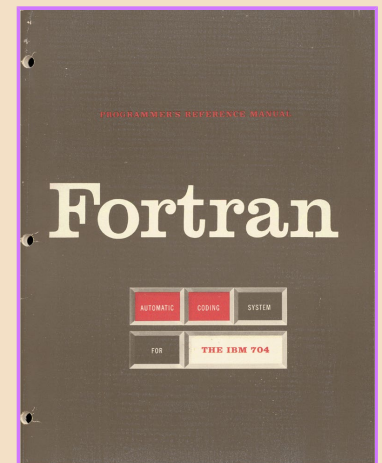
input statements

input statements

From the [IBM Programmer's Reference Manual FORTRAN Automatic Coding System for the IBM 704](#):

Provisions for Input and Output

Certain statements in the FORTRAN labguage cause the object program to be equipped with its necessary input and output programs. Those which deal with decimal information include conversion to or from binary, and permit considerable freedom of format in the external medium.



output statements

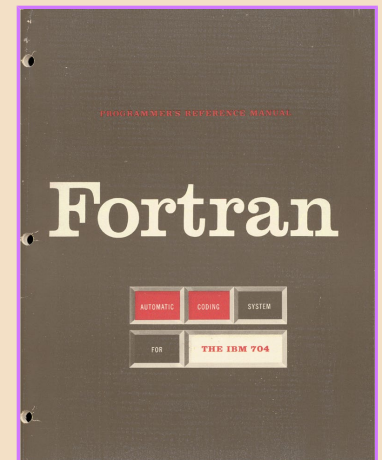
output statements

output statements

From the [IBM Programmer's Reference Manual FORTRAN Automatic Coding System for the IBM 704](#):

Provisions for Input and Output

Certain statements in the FORTRAN labguage cause the object program to be equipped with its necessary input and output programs. Those which deal with decimal information include conversion to or from binary, and permit considerable freedom of format in the external medium.



database statements

database statements

database statements

classes

classes

From the Wikipedia page on [Class \(computer programming\)](#)

In object-oriented programming, a class is an extensible program-code-template for creating objects, providing initial values for state (member variables) and implementations of behavior (member functions or methods). In many languages, the class name is used as the name for the class (the template itself), the name for the default constructor of the class (a subroutine that creates objects), and as the type of objects generated by instantiating the class; these distinct concepts are easily conflated. Although, to the point of conflation, one could argue that is a feature inherent in a language because of its polymorphic nature and why these languages are so powerful, dynamic and adaptable for use compared to languages without polymorphism present. Thus they can model dynamic systems (i.e. the real world, machine learning, AI) more easily.

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modules

modules

modules

packages

packages

packages

generic units

generic units

generic units

reflection

reflection

From the Wikipedia page on [Reflective programming](#)

In computer science, reflective programming or reflection is the ability of a process to examine, introspect, and modify its own structure and behavior.

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operations

operations

operations

resources

resources

resources

globals

globals

globals

concurrent execution

concurrent execution

concurrent execution

From the Wikipedia page on [Concurrent computing](#)

Concurrent computing is a form of computing in which several computations are executed *concurrently*—during overlapping time periods—instead of sequentially—with one completing before the next starts.

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tasks

tasks

From the Wikipedia page on [Task \(computing\)](#)

In computing, a task is a unit of execution or a unit of work. The term is ambiguous; precise alternative terms include *process*, light-weight process, *thread* (for execution), *step*, *request*, or *query* (for work). In the adjacent diagram, there are queues of incoming work to do and outgoing completed work, and a thread pool of threads to perform this work. Either the work units themselves or the threads that perform the work can be referred to as "tasks", and these can be referred to respectively as requests/responses/threads, incoming tasks/completed tasks/threads (as illustrated), or requests/responses/tasks.

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semaphores

semaphores

From the Wikipedia page on [Semaphore \(programming\)](#)

In computer science, a semaphore is a variable or abstract data type used to control access to a common resource by multiple threads and avoid critical section problems in a concurrent system such as a multitasking operating system. Semaphores are a type of synchronization primitive. A trivial semaphore is a plain variable that is changed (for example, incremented or decremented, or toggled) depending on programmer-defined conditions.

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asynchronous message passing

asynchronous message passing

asynchronous message passing

From the Wikipedia page on [Message passing](#)

In computer science, message passing is a technique for invoking behavior (i.e., running a program) on a computer. The invoking program sends a message to a process (which may be an actor or object) and relies on that process and its supporting infrastructure to then select and run some appropriate code. Message passing differs from conventional programming where a process, subroutine, or function is directly invoked by name. Message passing is key to some models of concurrency and object-oriented programming.

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remote procedure call

remote procedure call

From the Wikipedia page on [Remote procedure call](#)

In distributed computing, a remote procedure call (RPC) is when a computer program causes a procedure (subroutine) to execute in a different address space (commonly on another computer on a shared network), which is coded as if it were a normal (local) procedure call, without the programmer explicitly coding the details for the remote interaction. That is, the programmer writes essentially the same code whether the subroutine is local to the executing program, or remote. This is a form of client-server interaction (caller is client, executor is server), typically implemented via a request-response message-passing system. In the object-oriented programming paradigm, RPCs are represented by remote method invocation (RMI). The RPC model implies a level of location transparency, namely that calling procedures are largely the same whether they are local or remote, but usually, they are not identical, so local calls can be distinguished from remote calls. Remote calls are usually orders of magnitude slower and less reliable than local calls, so distinguishing them is important.

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rendevous

rendevous

A synchronous rendezvous barrier is a point where concurrent threads wait until all the threads have also reached the rendezvous point, and then they continue.

virtual machines

virtual machines

From the Wikipedia page on [Virtual machine](#)

In computing, a virtual machine (VM) is the virtualization/emulation of a computer system. Virtual machines are based on computer architectures and provide functionality of a physical computer.

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low-level programming

low-level programming

Low-level programming deals with the hardware, low level data structures, and the operating system kernel.

standard library

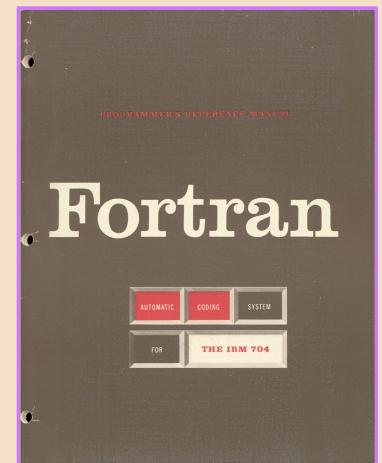
standard library

standard library

From the [IBM Programmer's Reference Manual FORTRAN Automatic Coding System for the IBM 704](#):

Inclusion of Library Routines

Pre-written routines to evaluate any single-valued functions of any number of arguments can be made available for incorporation into object programs by placing them on the master FORTRAN tape.



standard language additions

standard language additions

The standard language additions in **C** are: `__DATE__`, `errno`, `__FILE__`, `__LINE__`, `localeconv`, `mblen`, `mbtowc`, `mbstowcs`, `NULL`, `offsetof`, `perror`, `ptrdiff_t`, `setlocale`, `size_t`, `__STDC__`, `__TIME__`, `stdarg`, `stderr`, `wctomb`, `wchar_t`, and `wcstombs`.

character processing functions

character processing functions

The character processing functions in **C** are: `isalnum`, `isalpha`, `isascii`, `isctrl`, `iscsym`, `iscsymf`, `isdigit`, `isgraph`, `islower`, `isodigit`, `isprint`, `ispuncy`, `isspace`, `isupper`, `iswhite`, `isxdigit`, `toascii`, `toint`, `tolower`, and `toupper`.

string processing functions

string processing functions

The string processing functions in **C** are: `atof`, `atoi`, `atol`, `strcat`, `strchr`, `strcoll`, `strcmp`, `strcpy`, `strcspn`, `strlen`, `strncmp`, `strncpy`, `strpbrk`, `strpos`, `strrchr`, `ctrrpbrk`, `strrpos`, `strspn`, `strtod`, `strtok`, `strtol`, `strtoul`, and `strxfrm`.

memory functions

memory functions

The memory functions in **C** are: `bcmp`, `bcpy`, `bzero`, `memcpy`, `memchr`, `memcmp`, `memcpy`, `memmove`, and `memset`.

input output functions

input output functions

The input output functions in **C** are: `clearerr`, `EOF`, `fclose`, `feof`, `ferror`, `fflush`, `fgetc`, `fgetpos`, `fgets`, `FILE`, `fopen`, `fprintf`, `fputc`, `fputs`, `fread`, `freopen`, `fscanf`, `fseek`, `fsetpos`, `ftell`, `fwrite`, `getc`, `getchar`, `gets`, `mktemp`, `perror`, `printf`, `putc`, `putchar`, `puts`, `remove`, `rename`, `rewind`, `scanf`, `setbuf`, `setvbuf`, `sprintf`, `sscanf`, `stderr`, `stdin`, `stdout`, `tmpfile`, `tmpnam`, `ungetc`, `vfprintf`, `vprintf`, and `vsprintf`.

The digital I/O functions in `DigitalRead`, `DigitalWrite`, `PinMode`, `PulseIn`, `PulseInLong`, `ShiftIn`, `ShiftOut`, `Tone`, and `noTone`.

The analog I/O functions in `AnalogRead`, `AnalogReference`, `AnalogWrite`, `AnalogReadResolution`, and `AnalogWriteResolution`.

storage allocation functions

storage allocation functions

The storage allocation functions in **C** are: `calloc`, `cfree`, `clalloc`, `free`, `malloc`, `mlalloc`, `realalloc`, and `relalloc`.

mathematical functions

mathematical functions

The time and date functions in **C** are: `abs`, `acos`, `asin`, `atan`, `atan2`, `ceil`, `cos`, `cosh`, `div`, `exp`, `fabs`, `floor`, `fmod`, `frexp`, `HUGE_VAL`, `labs`, `ldexp`, `ldiv`, `log`, `log10`, `modf`, `pow`, `rand`, `sin`, `sinh`, `sqrt`, `srand`, `tan`, and `tanh`.

time and date functions

time and date functions

The time and date functions in **C** are: `acstime`, `clock`, `clock_t`, `CLOCKS_PER_SECOND`, `ctime`, `difftime`, `gmtime`, `localtime`, `mktime`, `strftime`, `time`, `time_t`, `times`, and `tm` (struct).

control functions

control functions

The control functions in **C** are: abort, alarm, assert, atexit, exec, exit, gsignal, jmp_buf, kill, longjmp, NDEBBUG, psignal, raise, setjmp, signal, sleep, ssignal, and system.

miscellaneous functions

miscellaneous functions

The miscellaneous functions in C:

Function	Description
1 <code>getenv()</code>	Gets the current value of an environment variable.
2 <code>setenv()</code>	Sets the value of an environment variable.
3 <code>putenv()</code>	Modifies the value of an environment variable.
4 <code>perror()</code>	Outputs descriptive error message to <code>stderr</code> .
5 <code>rand()</code>	Returns a random integer in the range of 0 to at least 32,767.
6 <code>delay()</code>	Suspends the program for the designated amount of milliseconds.

Other control functions in C are: `bsearch`, `ctermid`, `cuserid`, `getcwd`, `getwd`, `main`, and `qsort`.

parallel and distributed programming

parallel and distributed programming

This is my experiment in parallel and distributed programming. I will write this in Python. I have previously done very little Python programming.

I create a file titled `paradist.py`, that includes just the shebang and a print statement, and set the file to executable.

```
#!/usr/bin/env python  
print('Python running paradist.py\n')
```

It runs in shell.

I probably should quit while I am ahead (100% correct bug-free code), but some days you need a challenge.

If you have gotten this far and want to help fund housing and food for my severely mentally ill homeless friends, please contribute at [Help Annie GoFundMe page](#)

Games

games

Game topics:

Table Top Role Playing Games (TTRPGs)

Forge of Empires

Table Top Role Playing Games

Table Top Role Playing Games

Hasbro screwed over the entire D&D community in January of 2023.

I have a simple solution that allows everyone to keep playing their characters in a familiar manner without being beholden to any for profit corporation.

Check back regularly, because I am going to be updating this PDF often for a while.

I had an experience back in the early days of role playing games that will be useful in allowing hobbyists to move forward without Hasbro while still keeping their previous characters and methods of playing.

overflow game 1981

Friends of mine organized a gaming convention at the University of South Alabama in 1981. I got to attend for free.

Shortly after the convention stated, the guy in charge (I wish I could remember his name) asked me if I could run an overflow gaming session. All of the scheduled gaming sessions were full and a bunch of people wanted to play.

They had far more attendees than anticipated and people were complaining that all the scheduled game sessions were full.

I said yes. He asked me how many players I could take. I said I would take however many would fit into the room.

I had previously been analyzing the differences between the major RPGs of the time and noticed that (with one partial exception) they could all easily be synchronized.

I agreed to run a game session for the overflow crowd. About a half an hour later I was in one of the large lecture halls. I ran a gaming session for several hours with more than 100 players (I don't remember the exact number) using at least a dozen different game systems.

I told everyone that they could use their favorite character from any game system other than Tunnels & Trolls and that their character could be of any level, assuming their game system used levels.

I had three sets of monsters. The toughest was an ancient red dragon. I forget what the other two were, but they were groups of monsters appropriate for middle level characters and low level characters.

I let all the players decide which group they wanted to combat. The red dragon was in charge and the other two groups were on each side.

I pointed to a player and that player would announce their action and their dice roll. I would announce the result.

I would point to the next player. If a player wasn't ready, they lost their turn. When I reached the last player, I looped back to the beginning.

The vast majority of the players enjoyed themselves.

It was a lot of fun for everyone. And it showed that all of the games were really interchangeable. I had three charts for the essential conversions and none of the players needed to know how the conversions worked or that I was even doing conversions.

the system

With the exception of the combat system for Tunnels & Trolls all of the rules used the same system.

First step is to figure out what was the chance of the player succeeding at an action. Each game has its own modifiers.

Second step is to figure out what was the resistance to success, most commonly the other (player or non-player) character's chance for preventing the action. Each game has its own

modifiers.

Third step was to determine the results of success (such as damage). Again, each game has its own modifiers. Also, some games have results for failure, with modifiers.

For most systems, the key factors are adjustments to rolls for whether an attack works, whether a defense works, how much damage there is, and how much of that damage might be stopped.

Things like armor class and THAC0 get smoothed out by moving everything into one those four dice rolls.

The dice rolls come in two basic patterns: linear and bell curve.

A single die roll, such as percentile dice, d20, ordinary six sided die, etc. is linear. That is, there is an equal chance for any result.

Adding two or more dice (whether they are all the same kind of die or a mixture of types) produces a bell curve. The fewer dice rolled, the more likely that the extremes (high and low) will happen.

I found it easiest to convert all of the dice rolls to percentages. You can use any other system as your base because the results will be similar.

I converted the die rolls into a percentile (0 to 100) scale. Any single die linear result had its own multiplier (1d4 is multiplied by 25, 1d20 is multiplied by five). My charts showed how 2d6 and 3d6 bell curve results are charted onto percentile.

d20 rolls are simply multiplied by five to get percentage. Percent rolls are simply divided by five to get d20 rolls.

Way back then, I calculated the percentage chance of any particular result on 2d6 or 3d6 and created conversion charts. These percentages are available on many web pages (I will add them here soon).

While it isn't completely accurate, I found that the typical modifiers can simply be brought over from one game to another. A plus one or minus one is close to the same effect across game systems. if the modifiers are percentile, then divide by five.

For the most part I converted +/-1 from most game systems into +/-5 percent. It didn't matter whether the system was d20, 3d6, 2d6, or even 1d6.

Convert to percentile and add or subtract all the modifications to attack rolls, defense rolls, damage rolls, or adjustments to damage rolls.

I found I could ignore the units for time and distance and just treat them all as being on the

same unnamed time and distance scale. A few games had much larger time and/or distance numbers. I noted which games they were and adjusted by dividing a particular game by either two or three to move it into alignment with the other games.

upcoming

That basic system works amazingly well. It is possible to write a computer program or script that does completely accurate conversions.

So, with that in mind, I am going to start writing information on how to play any combination of TTRPGs from any company or homebrew without relying on any company or business.

I welcome any help and assistance.

I am willing to include information from anyone's game system, published or home brew.

I am also looking for a good name for this system. It may or may not be wise to use the letter D followed by an ampersand followed by another letter D.

ampersand

The ampersand goes back to at least the first century CE. Roman scribes who used cursive writing linked the E and the T of the Latin word *et* (meaning "and"). Over time the intertwined E and T became its own symbol for and.

By the early 1800s, the ampersand was the last letter of the English alphabet. Because there was potential confusion at the end of reciting the alphabet ("X, Y, Z, and"), the Latin phrase *per se* (meaning by itself) was added (spoken as "and per se and"), which got blurred together into the modern word ampersand.

Excuse my nerdy tangent, but this is a nerdary after all.

feedback

I hope you enjoy this. I would greatly appreciate **feedback**. At the time of writing this edition, the best place is at the Twitter account [@TSOStheband](#) (which includes a lot of different subjects, including political views you may despise).

Check back regularly, because I am going to be updating this PDF often for a while.

role playing games introductory basics

This chapter is intended for those who are new to Role Playing Games (RPGs). This is a brief explanation of how these games work.

Dungeons & Dragons divided an adventuring team into character classes. Each character class had a specific role in the adventuring party, encouraging every player to have an equal part in the adventure and the fun.

Character creation typically started with the assignment of attributes. These are scores (usually on a scale of 1-20, 3-18, or 1-100) that quantify basic abilities, such as intelligence, dexterity, and strength. The choice of attributes varies from game to game. Some games have primary and secondary attributes, usually with the secondary attributes being partially or completely derived from the primary attributes.

One common attribute is hit points, which is a measure of how much damage the character has taken, often with zero indicating either death or near death.

Most RPGs include multiple races, an unfortunate choice of terminology. I recommend that the different possibilities (usually humans, elves, dwarves, and similar fantasy people) be called people or maybe species. Let's remove the overt racism from RPGs.

Once the species is chosen, some games have rules for physical appearance and some leave the entire physical appearance to each player's imagination.

Some games have rules about backgrounds and some RPGs leave the entire background to each player's imagination.

Skills based RPGs often let players choose from lists of advantages and disadvantages at the time of character creation. At least one RPG has a system of minor advantages and disadvantages called quirks, which allow for customization of personality without wasting valuable character creation points.

While skills can be available as options in class-based RPGs, they are central to character



image by Marcel Ste from Pixabay

creation and game play in skill-based RPGs. In a skill-based RPG, the player typically spends a starting allotment of points on skills. As the character advances, the player gets more points to purchase additional skills.

Third Edition Dungeons & Dragons included feats available to player classes. These feats added special powers to a character. This started a trend of feats and other systems of options that allowed for players to customize their character's class.

Usually the last step in character creation is the choice of starting equipment.

A Dungeon Master (or DM, the term used in *Dungeons & Dragons*) or Game Master (GM) or some other similar title creates an adventure for the adventuring party to participate in.

The earliest adventures were dungeons, consisting of a series of rooms, each room possibly containing monsters to fight, traps to avoid or disarm, and treasures to collect. Over time, adventures became more robust story telling settings.



image by MasterTux from Pixabay

In addition to creating the adventure, the DM or GM plays the roles of all other people and monsters in the game world, as well as serving as the referee resolving all actions the players attempt.

The two most common approaches to a game session are either a One Shot (an isolated episode that occurs over one or two game sessions) or a Campaign (a long term game world setting where the players slowly move towards major goals over many game sessions).

I am not convinced that we need the term Master, which harkens to master and slave or master and servant. Terms such as Narrator or Story Teller or Referee are probably better.

Two major parts of most fantasy RPGs are a combat system and a magic system. Many magic systems use the *Dungeons & Dragons*'s pairing of divine magic (clerics, druids, etc.) and arcane magic (magic-users, wizards, etc.).

After one more introductory chapter with some general notes, this book will look at various common rules, and also look at how using ideas from real life and history can enrich a game session. The first general section will look at how people can best survive in emergency situations, followed by ideas that can be learned from historical and modern combat.

I hope you enjoy this. I would greatly appreciate feedback. At the time of writing this edition, the best place is at the Twitter account [@TSOStheband](#) (which includes a lot of different

subjects, including political views you may despise).

summary

This is a summary of the proposed unauthorized anarchy version of role playing game. These ideas will be expanded upon in future chapters.

A section of chapters on rules will follow. These chapters will look at common RPG rules and make suggestions on the proposed unauthorized anarchy version of role playing game.

The rules sections will be followed by sections and chapters looking at game playing advice that can be garnered from real life (modern and historical), research, and literature (including short stories, novels, books, magazines, poetry, arts, movies, TV, theater, etc.).

As mentioned in the introduction, the goal here is to have a much more free form and personalized version of RPG, where each group customizes for their particular preferences.

terminology

Role playing session: The typical role playing game session involves one referee and one or more players.

A **game session (or session)** is one period of time when the group comes together to play an RPG. If there is a short break (for snacks, bathroom, meals, etc.), the entire time is usually a single session.

The term **referee** refers to the player who resolves game play. The term **narrator** refers to the player who has crafted a setting and adventure for game play. Usually the referee and narrator are the same person.

The term **player(s)** refers to the human beings in the gaming session.

The term **character(s)** refers to the characters depicted in the game. A **player character (PC)** is a character controlled by one of the players. A **non-player character (NPC)** refers to all other characters in the game. It is possible that human players may play NPCs. This is normally done with either a large group or to provide for a person who is not normally part of the group to drop in for brief play.

game play

Genre: The players should agree on what genre of fiction they want to play together. *Dungeons & Dragons* is set in medieval fantasy. Some of the common RPG genres include: science fiction, horror, western, post-apocalypse, spy/espionage, gothic, crime/detective, romance, steampunk, cyberpunk, and superhero. It is possible to chose a “many worlds” game, where the players hop from setting to setting, much like Dr. Who.

Style/Tone: The players should agree on the style and tone of play. Play style can range from realistic to comedic. The tone or mood can vary greatly, with some moods more appropriate for certain genres.

Character creation: Each of the players (other than the referee) need to create a player character for themselves. Everyone can create characters using the same game system. Players can create their characters from different rules sets (it can be surprising how well different game systems can fit together). Players can pick a famous (or obscure) character from any media. Players can make up a character from their own imagination.

Most RPGs are very much worried about one player overshadowing the other players. It is typical to see roles separated by class just to make sure that every player has something unique to contribute to the game. There is nothing wrong with playing that way if that is the way your group wants to play.

I don't think it matters that much. DC Comics has Batman, anchored in the possibilities of a human being, and Superman, intentionally the most over powered character in comics, routinely work together (or even fight each other) and the stories flow fine. An imaginative and cooperative group of players should be able to handle wildly different levels of capabilities and create interesting stories and fun play together.

Decades ago I joined an *Advanced Dungeons & Dragons* group shortly after the game had been released. The other players had characters around level 10 and invited me to start with a level 10 player. I chose to start at level one because I wanted to learn the new version of *Dungeons & Dragons*.

In the first gaming session the group ran into a tough obstacle. My character was an elven magic user-fighter-thief. I used ordinary items from the spell components pouch to make a mechanism and used the thief climbing skills to get into place to release it over the on-going combat. The Dungeon Master decided to give everyone in our adventuring party a +1 on attack and +1 on defense. Everyone in our group having a 10% boost in combat quickly turned the battle into a rout.

Over the next several sessions as my character caught up in level, I continued to explore the possibilities of the game. I intentionally chose the unpopular spells. And looked for creative ways to make those unpopular spells useful. I kept finding specific spots where a less commonly used "lesser" spell made a key difference at a key moment.

I won't go into details. My point is that the PCs can have wildly varying levels of power and still work together.

Combat system: The vast majority of combat systems involve the following steps: selection of actions (and order that they occur), determining the modifiers for a particular attack or action, determining the modifier for the defense, rolling dice to determine whether the attack succeeds or

not, determining the modifiers for damage, rolling dice to determine the the damage (which get subtracted from some variation of hit points), along with some possible saving throw. Once you abstract everything, you just find where each games's rules fall into the steps and apply them accordingly.

The group can freely mix together whatever rules from whichever games they want, as well as make up their own rules. As long as everyone agrees, all is good.

Action resolution: Action resolution follows the same idea.

Magic systems: Magic systems can vary wildly from game to game and many games have multiple magic systems. No big deal. Eventually each magic system has results that have a specific effect on the game world. Let each player use whatever magic system they prefer (or even one they make up) and the referee only need to worry about the final resolution of the results.

Computations and dice rolls: There is a balance between detailed accuracy and fast play. Adjust your gaming sessions to match the desires of your group. If you want extreme accuracy, go for it. If you want things fast so you can keep role playing or cracking jokes or whatever else interests you, simplify. There is nothing inherently wrong with the referee quickly considering the factors and announcing a percentage chance and the player rolling dice. The referee can even ask the player or players how difficult they think the attempt is. There is nothing wrong with cooperatively deciding how the game plays out.

Flow of game: Every group has their own preference for game flow. Which parts of the game should slow down and become intricate and which parts should move on quickly.

Drama, like music, should have an ebb and flow of tension and release. Ideally a challenge should be presented, get solved, only to reveal a new (preferably tougher) challenge. The classic example of this is the Train Chase scene from Wallace and Gromit "The Wrong Trousers." The official Wallace and Gromit You Tube channel offers the [Train Chase](#) scene for free.

Game flow cards: I recommend getting a package of index cards (3x5 in the US and 76.2x127mm in the rest of the world). Write major kinds of actions on the cards and let players or the referee play the card of their choice at any time during the game.

Once a card is played, another player or the referee can play a card, either to modify the already played card or to cancel or overrule the already played card. The first player may either accept or reject the newly played card. If the first player rejects, the second player can put the matter to a group vote.

Any number of players (including those who have already played a card) may play additional cards until the group comes to an agreement on how the story has changed.

The referee or narrator can object to a chosen game flow because it might spoil what has been planned. Again, the group can override the referee or narrator, but generally it might be wise to

trust the referee or narrator. The narrator or referee can also suggest the game flow be delayed or modified in some way.

Some examples below (make up your own as well):

Abduction

Adultery

Adversity

Ambition

Chase

Combat

Comedy



image by Comfreak from Pixabay

Compassion

Complication

Conflict

Cruelty

Daring

Deliverance

Disaster

Dramatic flair (no real change from what is already occurring, but the player wants to infuse the action with a dramatic flair)

Enmity

Imprudence

Intrigue

Loss

Madness

Misfortune

Mistake

Pursuit

Recovery

Remorse

Revolt

Rivalry

Romance

Sacrifice

Supplication

Vengeance

role playing games

early history

Back near the beginning of the universe in the early Stelliferous Era there was a small rocky planet called Earth orbiting a yellow dwarf star. This planet was infested with a species known as humans.

Two of those humans, Gary Gygax and Dave Arneson, invented a game named *Dungeons & Dragons*.

Dungeons & Dragons developed out of miniatures war gaming. There were several wargames with fantasy elements, including M. A. R. Barker's *Tékumel* and Greg Stafford's *White Bear and Red Moon*.

Gary Gygax and Jeff Perren created a late medieval wargame called *Chainmail*. Later editions included an appendix for adding fantasy elements such as wizards and dragons. Dave Arneson mixed *Chainmail* and a set of rules by Dave Wesely. Arneson then created *Blackmoor*. Arneson and Gygax collaborated on the new game *Dungeons & Dragons*.



image by Mitaukano from Pixabay

The next role playing game (RPG) was Ken St. Andre's *Tunnels & Trolls*.

Other early fantasy role playing games included *Empire of the Petal Throne*, *Chivalry & Sorcery*, and *RuneQuest*. Early science fiction role playing games included *Metamorphosis Alpha*, *Traveller*, and *Gamma World*. The early super hero role playing game was *Superhero:2044*.

TSR released *Advanced Dungeons & Dragons*. Chaosium introduced *RuneQuest* and *Call of Cthulhu*. Iron Crown Enterprises released *RoleMaster*. Palladium released *Palladium Fantasy Role-Playing Game*. Victory Games released *James Bond 007*. West End Games released *Paranoia*.

Role playing games (RPG) tend to fall into two major types: class-based and skill systems.

In a class based RPG the player chooses a class (such as fighter, cleric, magic-user, or thief) which defines the character's capabilities and advances through levels, each of which adds additional capabilities.

In a skill based RPG the player chooses from available skills (and other capabilities), custom building a character with the features he or she prefers. Advancement occurs by adding more skills of capabilities.

Dungeons & Dragons and most RPGs are now called Table Top Role Playing Games (TTRPG), in contrast to an acting version called Live Action Role Playing (LARP), which is similar to historic battle recreations.

team

Dungeons & Dragons divided an adventuring team into character classes. Each character class had a specific role in the adventuring party, encouraging every player to have an equal part in the adventure and the fun.

Modern special forces are heavily cross trained and typically any member of the team can fill in for any other member of the team.

I understand the idea of separating roles for gaming purposes and to make sure that everyone has something they can shine doing, but that seems to me to be an artificial constraint.

Use the convention if you enjoy it.

Some typical roles in typical teams:

Role Playing Games

Fighter/Barbarian/Paladin

Cleric/Healer

Druid/Ranger

Archer

Wizard (study)

Sorcerer (innate)

Rogue/Thief

Bard

Monk

Super Hero Team (from the game *Mutants & Masterminds*)

Brain

Charmer

Enigma

Guardian

Hotshot

Outcast

Role Model

Survivor

Wisecracker

Antiquity and Medieval

Heavy Infantry (Knight, Cataphract)

Heavy Cavalry

Light Infantry

Light Cavalry

Foot Archer

Horse Archer

Mounted Infantry (Dragoon)

Slinger

Chariot

Pikeman/Hoplite

Artillery

Samurai can be classified as heavy or light cavalry

Special Forces A-Team

Detachment Commander

Detachment Technician

18Z Special Forces Operations Sergeant

18F Assistant Operations Sergeant

2x 18B Special Forces Weapons Sergeant

2x 18C Special Forces Engineer Sergeant

2x 18D Special Forces Medical Sergeant

2x 18E Special Forces Communications Sergeant

Rifle Team

Rifle Squad Leader

Fire Team Leader

Rifleman

Grenadier

Squad Automatic Rifleman

Support from Rifle Platoon Headquarters

Rifle Platoon Leader

Rifle Platoon Sergeant

Radio Telephone Operator

Combat Medic

Field Artillery Forward Observer

Support from Rifle Company Headquarters

Rifle Company Commander

Rifle Company First Sergeant

Rifle Company Executive Officer

60mm Mortar Section

Company Fire Support Officer

Company Communications Officer

Combat Engineer Sapper Team

Space Ships (Star Trek)

Captain

Executive Officer/First Officer

Chief Operations Officer/Second Officer

Operations Officer

Quartermaster

Chief Science Officer

Science Officer

Chief Engineer

Engineer

Communications Officer

Navigation Officer

Chief Helm Officer

Helmsman/Helm Officer/Pilot

Security Officer

Master-at-Arms

Chief Tactical Officer

Tactical Officer

Weapons Officer

Chief Medical Officer

Medical Officer

Head Nurse

Nurse

Chief Counselor

Counselor

Morale Officer

rules

rules basics

As of the writing of this book, Wizards of the Coast offers a free download of the Basic Rules for *Dungeons & Dragons*.

“Set in a medieval fantasy world, D&D allows you to experience stories and adventures full of endless possibilities and amazing surprises. The Basic Rules for Dungeons & Dragons is a PDF that covers the core of the tabletop game.”

“The *Basic Rules* runs from levels 1 to 20 and covers the cleric, fighter, rogue, and wizard, presenting what we view as the essential subclass for each. It also provides the dwarf, elf, halfling, and human as race options; in addition, the rules contain 120 spells, 5 backgrounds, and character sheets. But the best part? The *Basic Rules* is a free PDF. Anyone can download it from our website. We want to put D&D in as many hands as possible, and a free, digital file is the best way to do that.”

“**Part 1** is about creating a character, providing the rules and guidance you need to make the character you’ll play in the game. It includes information on the various races, classes, backgrounds, equipment, and other customization options that you can choose from. Many of the rules in part 1 rely on material in parts 2 and 3.”

“**Part 2** details the rules of how to play the game, beyond the basics described in this introduction. That part covers the kinds of die rolls you make to determine success or failure at the tasks your character attempts, and describes the three broad categories of activity in the game: exploration, interaction, and combat.”

“**Part 3** is all about magic. It covers the nature of magic in the worlds of D&D, the rules for spellcasting, and a selection of typical spells available to magic-using characters (and monsters) in the game.”

“**Part 4** is about tools for Dungeon Masters. It includes information and stat blocks for monsters, advice for building combat encounters, and magic items.”

Get the free download from this [web page](#).

From d20 SDR (e3.0):

Basics

Dice Notation

These rules use the following die notations:

- **d4** = four sided die
- **d6** = six sided die
- **d8** = eight sided die
- **d10** = ten sided die
- **d12** = twelve sided die
- **d20** = twenty sided die
- **d%** = percentile dice

Die rolls are expressed in the format:

[#] die type [+/- modifiers]

Example: 3d6+2 means: "Roll 3 six sided dice. Add the result of the three dice together. Add 2."

Rounding Fractions

In general, if you wind up with a fraction, round down, even if the fraction is one-half or larger.

Exception: Certain rolls, such as damage and hit points, have a minimum of 1.

Multiplying

Sometimes a special rule makes you multiply a number or a die roll. As long as you're applying a single multiplier, multiply the number normally. When two or more multipliers apply, however, combine them into a single multiple, with each extra multiple adding 1 less than its value to the first multiple. Thus, a double (x2) and a double (x2) applied to the same number results in a triple (x3, because $2 + 1 = 3$).

Basic Task Resolution System

These rules assume a standardized system for determining the success or failure of any given task. That system is:

d20 + Modifiers vs. Target Number

The Modifiers and Target Number are determined by the type of task. If the result of the d20 roll + the Modifiers equals or exceeds the Target Number, the test is successful. Any other result is a failure. A “natural 20” on the die roll is not an automatic success. A “natural 1” on the die roll is not an automatic failure.

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rules

dice rolls

Dice rolls are used to determine the results of actions and other game activity.



image by Ana Carolina Franco from Pixabay

A common system is the format of $x dy \pm z$ where x is the number of dice rolled, y is the kind of dice rolled, and z is a modifier added after the dice are rolled.

An example is $3d6+2$, which means rolling three (3) six-sided dice (the ordinary kind), adding up the total, and then adding an additional two for the final result.

Typical kinds of dice are four sided, six sided, eight sided, ten sided, twelve sided, and twenty sided. Twenty sided dice can double as ten sided dice by ignoring the tens digit. On a ten sided die, a zero can indicate 10. On a twenty sided die, a zero can indicate 20. There are 100 sided dice, but usually percentile rolls are done with two ten sided dice of two different colors (one designated for the tens digit and the other designated for units digit).

Some games require the player to equal or exceed a goal for success, while others require the

player to be equal to or less than the goal for success, and some use both systems depending on what kind of activity is being resolved.

3e SRD:Basics

The Basics

The Core Mechanic

These rules assume a standardized system for determining the success or failure of any given task. That system is:

d20 + Modifiers vs. Target Number

The Modifiers and Target Number are determined by the type of task.

If the result of the d20 roll + the Modifiers equals or exceeds the Target Number, the test is successful. Any other result is a failure.

A "natural 20" on the die roll is not an automatic success. A "natural 1" on the die roll is not an automatic failure.

Dice

These rules use the following die notations:

- d4 = four sided die
- d6 = six sided die
- d8 = eight sided die
- d10 = ten sided die
- d12 = twelve sided die
- d20 = twenty sided die
- d% = percentile dice

Die rolls are expressed in the format:

[#] die type [+/- modifiers]

Example: 3d6+2 means: "Roll 3 six sided dice. Add the result of the three dice together. Add 2."

Rounding Fractions

In general, if you wind up with a fraction, round down, even if the fraction is one-half or larger.

Exception: Certain rolls, such as damage and hit points, have a minimum of 1.

Multiplying

Sometimes a special rule makes you multiply a number or a die roll. As long as you're applying a single multiplier, multiply the number normally. When two or more multipliers apply, however, combine them into a single multiple, with each extra multiple adding 1 less than its value to the first multiple. Thus, a double (x2) and a double (x2) applied to the same number results in a triple (x3, because $2 + 1 = 3$).

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rules

character creation

Character creation is the process of a player creating a Player Character (PC) to play the game.



image by Alexandra d from Pixabay

Various RPGs have rules of varying complexity for creating characters. Some are simple and fast, while others are complex and time consuming.

Often it can be difficult to create a specific character, either one from imagination or one from literature.

I think that if anyone wants to play a particular character, including famous characters from either literature or history, that the player should be able to play their chosen character.

As far as game balance goes, if DC Comics can find ways for a human such as Batman to interact as an equal with Superman, the most overpowered character in literature, then any mix of character power and level should be playable. It may take effort by the players and their referee, but it should be possible.

rules

attributes

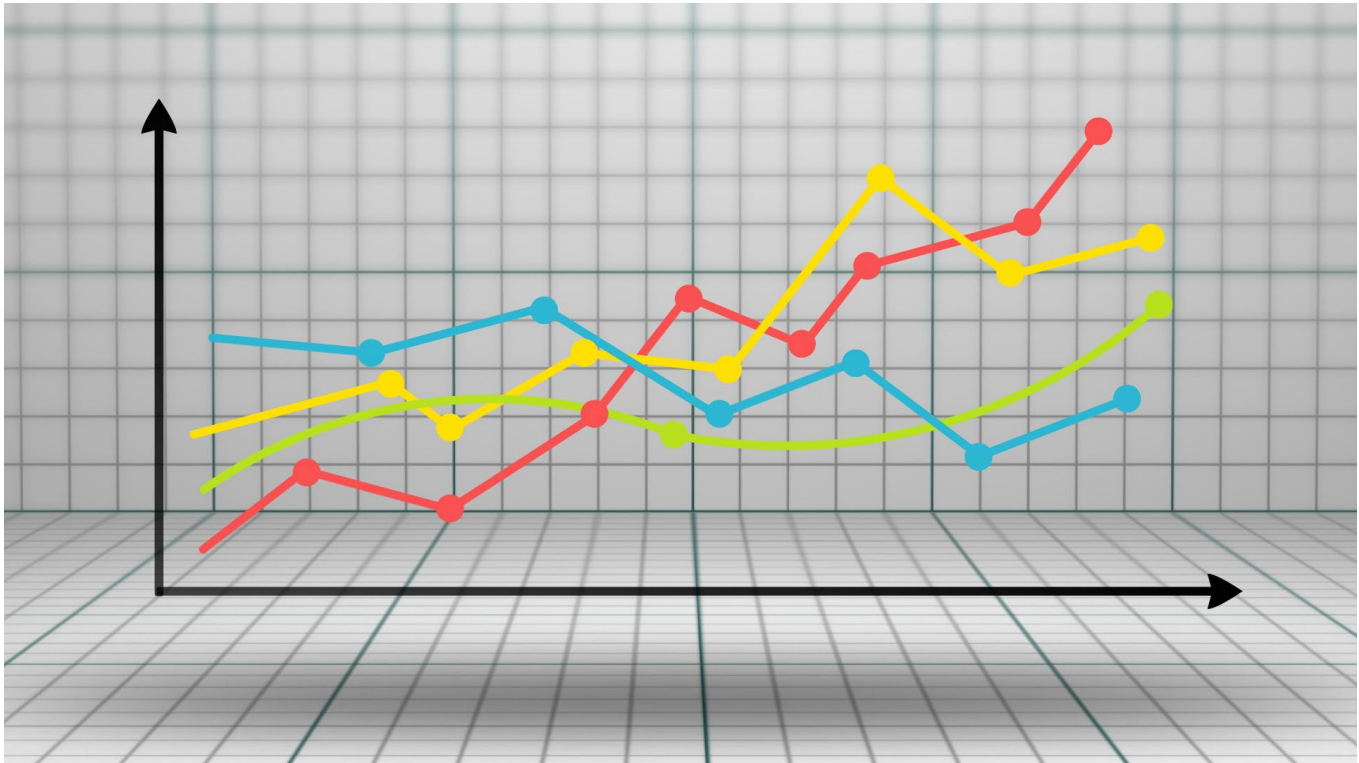


image by Mediamodifier from Pixabay

Character creation typically started with the assignment of attributes (sometimes called stats or statistics). These are scores (usually on a scale of 3-18, 1-20, or 1-100) that quantify basic abilities, such as intelligence, dexterity, and strength. The choice of attributes varies from game to game. Some games have primary and secondary attributes, usually with the secondary attributes being partially or completely derived from the primary attributes.

One common attribute is hit points, which is a measure of how much damage the character has taken, often with zero indicating either death or near death.

From the Wikipedia page on [Attribute \(role-playing games\)](#)

Attribute (role-playing games)

An **attribute** is a piece of data (a “statistic”) that describes to what extent a fictional character in a role-playing game possesses a specific natural, in-born characteristic common to all characters in the game. That piece of data is usually an abstract number or, in some cases, a set of dice. Some games use

different terms to refer to an attribute, such as **statistic**, **(primary) characteristic**, or **ability**. A number of role-playing games like *Fate* do not use attributes at all.

The nature of attributes

There is no uniform consensus on what ability scores are, even if many role-playing games have them, but games that use them have a common theme. According to the BBC Cult TV website “All characters have Attributes — basic physical and mental abilities.” and in the *Pathfinder Roleplaying Game* “Each character has six ability scores that represent his character’s most basic attributes. They are his raw talent and prowess. While a character rarely rolls a check using just an ability score, these scores, and the modifiers they create, affect nearly every aspect of a character’s skills and abilities.” In some games, such as older versions of *Dungeons & Dragons* the attribute is used on its own to determine outcomes, whereas in many games, beginning with *Bunnies & Burrows* and including more modern versions of *D&D*, the attribute works with a skill to affect the overall outcome.

Common types of attribute system

There is no standard amongst role-playing games as to which attributes are important for the game, though there is a school of design which says you pick the attributes after you decide what the game is about.

Set attribute systems

Dungeons & Dragons

Dungeons & Dragons used six attributes (there were brief attempts to add a seventh, Comeliness, in *Unearthed Arcana* and *Dragon* magazine, but this was short-lived). The six attributes used in *D&D* are:

“Physical” statistics

- Strength - measuring physical power and carrying capacity
- Constitution - measuring endurance, stamina and good health
- Dexterity - measuring agility, balance, coordination and reflexes

“Mental” statistics

- Intelligence - measuring deductive reasoning, cognition, knowledge, memory, logic and rationality
- Wisdom - measuring self-awareness, common sense, restraint, perception and insight
- Charisma - measuring force of personality, persuasiveness, leadership and successful planning

These range from about 3 to 20 (depending on the edition).

The attribute sequence in *D&D* was originally: Strength, Intelligence, Wisdom, Dexterity, Constitution, and Charisma, sometimes referred to as “SIWDCC”.

This listed the four “prime requisites” of the character class families before the “general” stats: strength for fighters, intelligence for magic-users, wisdom for clerics, and dexterity for thieves. The current “SDCIWC” sequence was introduced in *AD&D* 2nd edition in an attempt to divide physical and cognitive traits into two groups.

Other games

Many other notable games have followed suit while slightly varying the attributes, like *Traveller* (Strength, Dexterity, Endurance, Intelligence, Education, Social Standing) or like Cortex System games such as the *Serenity RPG* and the Cortex Plus *Leverage* with Agility, Alertness, Intelligence, Strength, Vitality, and Willpower.

Others use more, some fewer. Tri-Stat dX (including *Big Eyes, Small Mouth*), as the name would suggest, uses three (Body, Mind, and Soul), whereas a more common division of three, and used in the Cortex Plus game *Firefly* is Physical, Mental, and Social, but expands with the Storyteller System's attributes.

SPECIAL is an acronym statistics system developed specifically for the *Fallout* series, representing the seven attributes used to define *Fallout* characters: **S**trength, **P**erception, **E**ndurance, **C**harisma, **I**ntelligence, **A**gility, and **L**uck. SPECIAL is heavily based on *GURPS*, which was originally intended to be the character system used in the game.

Some games have used particularly complex systems. For instance, *F.A.T.A.L.* uses a system of five attributes with four sub-attributes each, resulting in twenty total statistics to roll. This system was criticised for its complexity and for the lack of correlation between related sub-statistics, resulting in oddities such as a character with a higher Average Speech Rate than Maximum Speech Rate.

Classifications

The first three editions of *Shadowrun* had three separate headings of Physical attributes, Mental Attributes, and Special Attributes, with three stats in each. With the six non-special attributes being Strength, Quickness, Body, Charisma, Intelligence, and Willpower, and two of the three special attributes relating to magic and the third being derived, this is arguably a six attribute system.

The Storyteller System used in games like *Vampire: The Masquerade* took this one step further, breaking the attributes down into three by three classifications. Power, Finesse, and Resistance, and Mental, Physical, and Social, leading to nine different combinations each of which has a separate name with, for example, Mental Finesse being the attribute Wits and Social Resistance being Composure.

Stats and substats

Some games think that attributes are not and should not be treated as entirely independent, and therefore make a lot of their attributes dependent on others. *GURPS* uses two levels of statistic - four primary statistics (Strength, Dexterity, Intelligence, Health), and four statistics derived directly from those (Fatigue which defaults to strength or health depending on edition, Hit Points (health or strength depending on edition), Willpower (defaults to intelligence), and Speed (defaults to half the average of health and dexterity)). Hero System 5th edition has eight primary statistics, and a further five derived from them.

Fitting the setting

Some game systems such as those using the Cortex Plus system or those Powered by the Apocalypse work on the basis that the attributes should emphasise elements of the setting thus making them different from game to game even within the same family. So, for example, *Dungeon World* is meant to resemble a game of *D&D* so it uses the same statistics as above, whereas *Monsterhearts*, with its mix of teen drama and paranormal romance uses the statistics Hot, Cold, Violent, and Dark.

Common attribute names

Attributes are commonly referred to by a three letter abbreviation (Str, Int, etc.).

Hard statistics

Hard statistics are those statistics which are generally physical in nature, and are often used to represent physical characteristics of a character.

Soft statistics

Strength *aka Body, Might, Brawn, Power ...*

A measure of how physically strong a character is. Strength often controls the power and/or damage of melee attacks, the maximum weight the character can carry, and sometimes hit points. Armor and weapons might also have a Strength requirement to use them

Constitution *aka Stamina, Endurance, Vitality, Recovery ...*

A measure of how sturdy a character is. Constitution often influences hit points, resistances for special types of damage (poisons, illness, heat etc.) and fatigue.

Defense *aka Resistance, Fortitude, Resilience, ...*

A measure of how resilient a character is. Defense usually decreases taken damage by either a percentage or a fixed amount per hit. Occasionally combined with Constitution.

Dexterity *aka Agility, Reflexes, Quickness, ...*

A measure of how agile a character is. Dexterity controls attack and movement speed and accuracy, as well as evading an opponent's attack (see Armor Class).

Soft statistics are those statistics which are generally cognitive in nature, and are often used to represent nonphysical characteristics of a character. Alternatively, instead of being mental statistics, they may also represent certain nonphysical effects on a character, as with attributes such as Luck, seen below.

Intelligence *aka Intellect, Mind, Knowledge, ...*

A measure of a character's problem-solving ability. Intelligence often controls a character's ability to comprehend foreign languages and their skill in magic. In some cases, intelligence controls how many skill points the character gets at "level up". In some games, it controls the rate at which experience points

are earned, or the amount needed to level up. Under certain circumstances, this skill can also negate combat actions between players and NPC enemies. This is sometimes combined with wisdom and/or willpower.

Charisma *aka Presence, Charm, Social, ...*

A measure of a character's social skills, and sometimes their physical appearance. Charisma generally influences prices while trading and NPC reactions. Under certain circumstances, this skill can negate combat actions between players and NPC enemies.

Wisdom *aka Spirit, Wits, Psyche, Sense, ...*

A measure of a character's common sense and/or spirituality. Wisdom often controls a character's ability to cast certain spells, communicate to mystical entities, or discern other characters' motives or feelings.

Willpower *aka Sanity, Personality, Ego, Resolve, ...*

A measure of the character's mental resistance (against pain, fear etc.) when falling victim to mind-altering magic, torture, or insanity. Many games combine willpower and wisdom.

Perception *aka Alertness, Awareness, Cautiousness, ...*

A measure of a character's openness to their surroundings. Perception controls the chance to detect vital clues, traps or hiding enemies, and might influence combat sequence or the accuracy of ranged attacks. Perception-type attributes are more common in more modern games. Note that this skill is usually understood only to apply to what a character can perceive with their established senses (i.e. sight, sound, smell, etc), and does not usually include extrasensory perception or other forms of mental telepathy or telekinesis in the given game unless the character's specific attributes expressly include such abilities (such as the Force in *Star Wars*). Sometimes combined with wisdom.

Luck *aka Fate, Chance, ...*

A measure of a character's luck. Luck might influence anything, but mostly random items, encounters and outstanding successes/failures (such as critical hits).

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From d20 SDR (e3.0):

Ability Scores

Every character has six basic Ability Scores:

- Strength (STR)
- Dexterity (DEX)
- Constitution (CON)
- Intelligence (INT)
- Wisdom (WIS)
- Charisma (CHA)

The score of an ability ranges from 0 to infinity. A limit, if any, will be specified in the rules. The normal human range is 3 to 18. It is possible for a creature to have a score of “none”. A score of “none” is not the same as a score of “0”. A score of “none” means that the creature does not possess the ability at all. The modifier for a score of “none” is +0.

- STR 0 means that the character cannot move at all. He lies helpless on the ground.
- DEX 0 means that the character cannot move at all. He stands motionless, rigid, and helpless.
- CON 0 means that the character is dead.
- INT 0 means that the character cannot think and is unconscious in a coma like stupor, helpless.
- WIS 0 means that the character is withdrawn into a deep sleep filled with nightmares, helpless.
- CHA 0 means that the character is withdrawn into a catatonic, coma like stupor, helpless.

Keeping track of negative ability score points is never necessary. A character's ability score can't drop below 0.

Ability Modifiers

Each ability will have a modifier. The modifier can be calculated using this formula:

$$(\text{ability} / 2) - 5 \text{ [round result down]}$$

The modifier is the number you add to or subtract from the die roll when your

character tries to do something related to that ability. A positive modifier is called a bonus, and a negative modifier is called a penalty.

Use of Ability Scores

Strength

Any creature that can physically manipulate other objects has at least 1 point of Strength. A creature with no Strength score can't exert force, usually because it has no physical body or because it doesn't move. The creature automatically fails Strength checks. If the creature can attack, it applies its Dexterity modifier to its base attack instead of a Strength modifier.

Dexterity

Any creature that can move has at least 1 point of Dexterity. A creature with no Dexterity score can't move. If it can act, it applies its Intelligence modifier to initiative checks instead of a Dexterity modifier. The creature fails all Reflex saves and Dexterity checks.

Constitution

If a character's Constitution changes enough to alter his or her Constitution modifier, his or her hit points also increase or decrease accordingly at the same time. Any living creature has at least 1 point of Constitution. A creature with no Constitution has no body or no metabolism. It is immune to any effect that requires a Fortitude save unless the effect works on objects. The creature is also immune to ability damage, ability drain, and energy drain, and always fails Constitution checks.

Intelligence

Any creature that can think, learn, or remember has at least 1 point of Intelligence. A creature with no Intelligence score is an automaton, operating on simple instincts or programmed instructions. It is immune to all mind-influencing effects (charms, compulsions, phantasms, patterns and morale effects) and automatically fails Intelligence checks.

Wisdom

Any creature that can perceive its environment in any fashion has at least 1 point of Wisdom. Anything with no Wisdom score is an object, not a creature. Anything without a Wisdom score also has no Charisma score, and vice versa.

Charisma

Any creature capable of telling the difference between itself and things that are not itself has at least 1 point of Charisma.

Influencing Other Characters

It is possible to alter another's attitude with a Charisma check (1d20 + Charisma

modifier). Roll the check and consult the appropriate initial attitude line on Table: Influencing Attitude to see what the result of the roll is.

In general, a character cannot repeat attempts to influence someone.

Table: Influencing Attitude

Initial Attitude	New Attitude				
	Hostile	Unfriendly	Indifferent	Friendly	Helpful
Hostile	Less than 20	20	25	35	50
Unfriendly	Less than 5	5	15	25	40
Indifferent	—	Less than 1	1	15	30
Friendly	—	—	Less than 1	1	20

Anything with no Charisma score is an object, not a creature. Anything without a Charisma score also has no Wisdom score, and vice versa.

Changing Ability Scores

Ability scores can increase with no limit.

- Poisons, diseases, and other effects can temporarily harm an ability (temporary ability damage.) Ability points lost to damage return on their own, typically at a rate of 1 point per day.
- Some effects drain abilities, resulting in a permanent loss (permanent ability drain.) Points lost this way don't return on their own.
- As a character ages, some ability scores go up and others go down.

When an ability score changes, the modifier associated with that score also changes.

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rules

hit points

Hit points are a way to measure the health of and damage to a character.

From the Wikipedia page on [Health \(game terminology\)](#)

Health (game terminology)

Health or hit points (commonly abbreviated to HP) is an attribute in tabletop role-playing games and video games that determines the maximum amount of damage that a character or object can take. If the amount of health is fully depleted, the character dies or loses consciousness. Such a character can be the player character, a mob, or a boss. Health can also be attributed to destructible elements of the game environment or inanimate objects such as vehicles and their individual parts. In video games, health is often represented by visual elements such as a numerical fraction, a health bar or a series of small icons, though it may also be represented acoustically, such as through a character's heartbeat.

History

The term “hit points” was first coined by *Dungeons & Dragons* co-creator Dave Arneson. While developing *Dungeons & Dragons* with Gary Gygax based on the latter's previous game *Chainmail*, Arneson noticed that it was more interesting for players to manage small squads than a large army. This also allowed them to act out the role of each squad member. However, this approach had one drawback: according to the rules of *Chainmail*, the player rolls the dice during each battle, and depending on the number rolled, the character either kills the enemy or is killed. Because players did not want to lose the characters they had become accustomed to, Arneson created a “hit point” system based on similar mechanics previously used in *Don't Give Up the Ship* and *Ironclads*. According to this system, each character has a certain number of hit points, which decreases with each blow dealt to them. This allows the character to survive several hits from an enemy.

Some of the first computer games to use hit points are *Rogue* (1980), in which health is represented by a fraction, and *Dungeons of Daggorath* (1982), which

includes an audible heartbeat influenced by the player character's condition. One of the first games to use a graphical indicator for health points is Nintendo's 1983 arcade title *Punch-Out!!*. The game includes a "stamina" scale that replenishes every time the player successfully strikes the opponent and decreases if the player fails to dodge the opponent's blow. If the scale is fully depleted, the player character loses consciousness. Namco's 1985 title *Dragon Buster* is considered the first game to have popularized the use of a health bar. Before the introduction of health points, video games used a life system in which the player could only take damage once, but could continue the game at the expense of a life. The introduction of health mechanics granted players the right to make mistakes and allowed game developers to influence a game's difficulty by adjusting the damage an enemy character inflicts.

Mechanics

In video games, as in tabletop role-playing games, an object usually loses health points as a result of being attacked. Protection points or armor help them to reduce the damage taken. Characters acting as tanks usually have more health and armor. In many games, particularly role-playing video games, the player starts with a small amount of health and defense points, but can increase them by gaining the required amount of experience points and raising the character's level.

In game design, it is considered important to clearly show that the player's character (or other object that they control) is losing health points. In his book *Level Up!: The Guide to Great Video Game Design*, game designer Scott Rogers wrote that "health should deplete in an obvious manner, because with every hit, a player is closer to losing their life". As examples of visualizing health loss, Rogers cited Arthur of *Ghosts 'n Goblins*, who loses a piece of armor with each sustained hit, as well as the cars in the *Grand Theft Auto* series, in which smoke begins to flow from the hood after the car takes a significant amount of damage.

The use of health points simplifies the game development process (since developers do not need to create complex damage systems), allows computers to simplify calculations associated with the game, and makes it easier for the player to understand the game. However, more complex and realistic damage systems are used in a number of games. In *Dwarf Fortress*, instead of health points, dwarves have separate body parts, each of which can be damaged. The *Fallout* games use health points, but allow characters to inflict damage to different parts of the enemy's body, which affects gameplay. For example, if a leg is injured, the character can get a fracture, which will reduce their

movement speed, and if their arm is injured, the character can drop their weapon. Health points can also serve as a plot element. In *Assassin's Creed*, if the protagonist takes too much damage, thus departing from the “correct” route, the game ends and returns the player to the nearest checkpoint.

In some games such as *The Legend of Zelda* and *Monster Hunter*, only the player's health points are visible. This is done so that the player does not know how many blows still need to be delivered, which makes the game less predictable. Contrariwise, other games such as the *Street Fighter* series have both the player's and the opponent's health points clearly visible, which allows the player to understand how successful their combat strategy is and how many remaining blows need to be inflicted on the enemy.

Regeneration

Players can often restore a character's health points by using various items such as potions, food or first-aid kits. In role-playing video games, the player often can also restore a character's health by visiting a doctor or resting at an inn. A number of games incorporate a mechanic known as “life steal” or “life leech”, which allows a character to restore health by siphoning it from an enemy. Methods for replenishing health points differ from each other and are dependent on the game's genre. In more dynamic action games, it is important to quickly restore a character's health, while role-playing games feature slower-paced methods of health restoration to achieve realism.

A number of games incorporate a regeneration system that automatically replenishes health points if the character does not take damage. This makes the game easier to play by giving the player the opportunity to restore the character's health after a difficult battle. This system may allow the player to safely run through dangerous parts of the game without consequence. The 1982 Apple II platform game *Crisis Mountain* displays health as a number from 3 (full) to 0 (dead), and health gradually regenerates over time. In *Hydlide* (1984) and the *Ys* series, the character's health points are restored when the character does not move. *Halo: Combat Evolved* (2001) is credited with popularizing the use of regeneration in first-person shooters. However, according to GamesRadar+'s Jeff Dunn, regeneration in its current form was introduced in *The Getaway* (2002), as *Halo: Combat Evolved* only used shield regeneration.

Presentation

The health point indicator can be represented in various ways. The most basic

forms are fractions and health bars, as well as various icons such as hearts or shields. The indicator can be combined with other elements of the game interface. *Doom* uses a character portrait located at the bottom of the screen as such an indicator. If the hero takes damage, his face will be covered with blood. The health point indicator can also be part of the character. In *Dead Space*, it is located on the main character's costume. In *Trespasser*, it is represented as a tattoo on the main character's chest. In *Half-Life: Alyx*, a VR game, the indicator is located on the back of the player's non-dominant hand, requiring the player to physically look at their tracked hand to check their health. The character's condition can be conveyed through sound. In *Dungeons of Daggorath*, the frequency of the player character's audible heartbeat is dependent on how much damage has been received. *Silent Hill* uses a similar system, but transmits the heartbeat via vibrations from the DualShock controller.

The player character's health point indicator often occupies a significant position in the game's heads-up display. In *The Legend of Zelda*, it occupies one third of the entire display. However, a number of games do without such an indicator. In the *Super Mario* series, the player character initially only has one health point, and the character's appearance is used to signify the amount of health points; if the character collects a Super Mushroom, they grow in size and gain an additional health point. In a number of first-person shooters, such as *Call of Duty* or *Halo*, the numerical value of the character's health points is hidden from the player. However, when the player character receives a large amount of damage, the game screen (or the part of the screen to which damage was dealt) is painted red, often including drops of blood, which simulates the effect of real-life injury. As health is restored, these effects gradually disappear.

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From d20 SDR (e3.0):

Hit Points

All characters (and some items) have a certain number of hit points.

Hit points represent a character's luck, health, and basic physical condition.

If a character's Constitution changes, modify that character's hit point total immediately.

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rules

age

From d20 SDR (e3.0):

Aging Effects

Age

When a character becomes venerable, the DM secretly determines her maximum age. When the character reaches her personal maximum age, she dies of old age at some time during the following year, as determined by the DM.

Table: Aging Effects

Race	Middle Age*	Old**	Venerable***	Maximum Age
Dwarf	125 years	188 years	250 years	+2d% years
Elf	175 years	263 years	350 years	+4d% years
Gnome	100 years	150 years	200 years	+3d% years
Half-Elf	62 years	93 years	125 years	+3d20 years
Half-Orc	30 years	45 years	60 years	+2d10 years
Halfling	50 years	75 years	100 years	+5d20 years
Human	35 years	53 years	70 years	+2d20 years

* –1 to Str, Con, and Dex; +1 to Int, Wis, and Cha.
** –2 to Str, Con, and Dex; +1 to Int, Wis, and Cha.
*** –3 to Str, Con, and Dex, +1 to Int, Wis, and Cha.

Aging effects are cumulative

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rules

height and weight

From d20 SDR (e3.0):

Height and Weight

Height and Weight

Table: Random Height and Weight

Race	Base Height	Height Modifier	Base Weight	Weight Modifier
Dwarf, male	3 ft. 9 in.	+2d4	130 lb.	x (2d6) lb.
Dwarf, female	3 ft. 7 in.	+2d4	100 lb.	x (2d6) lb.
Elf, male	4 ft. 5 in.	+2d6	85 lb.	x (1d6) lb.
Elf, female	4 ft. 5 in.	+2d6	80 lb.	x (1d6) lb.
Gnome, male	3 ft. 0 in.	+2d4	40 lb.	x 1 lb.
Gnome, female	2 ft. 10 in.	+2d4	35 lb.	x 1 lb.
Half-Elf, male	4 ft. 7 in.	+2d8	100 lb.	x (2d4) lb.
Half-Elf, female	4 ft. 5 in.	+2d8	80 lb.	x (2d4) lb.
Half-Orc, male	4 ft. 10 in.	+2d10	130 lb.	x (2d4) lb.
Half-Orc, female	4 ft. 4 in.	+2d10	90 lb.	x (2d4) lb.
Halfling, male	2 ft. 8 in.	+2d4	30 lb.	x 1 lb.
Halfling, female	2 ft. 6 in.	+2d4	25 lb.	x 1 lb.
Human, male	4 ft. 10 in.	+2d10	120 lb.	x (2d4) lb.
Human, female	4 ft. 5 in.	+2d10	85 lb.	x (2d4) lb.

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rules

alignment

Alignment in *Dungeons & Dragons* is measured on a scale of good-neutral-evil and lawful-neutral-chaos.

From d20 SDR (e3.0):

Alignment

A character's or creature's general moral and personal attitudes are represented by its alignment: lawful good, neutral good, chaotic good, lawful neutral, neutral, chaotic neutral, lawful evil, neutral evil, and chaotic evil.

Good vs. Evil

Good characters and creatures protect innocent life. Evil characters and creatures debase or destroy innocent life, whether for fun or profit.

“Good” implies altruism, respect for life, and a concern for the dignity of sentient beings. Good characters make personal sacrifices to help others.

“Evil” implies hurting, oppressing, and killing others. Some evil creatures simply have no compassion for others and kill without qualms if doing so is convenient. Others actively pursue evil, killing for sport or out of duty to some evil deity or master.

People who are neutral with respect to good and evil have compunctions against killing the innocent but lack the commitment to make sacrifices to protect or help others. Neutral people are committed to others by personal relationships. A neutral person may sacrifice himself to protect his family or even his homeland, but he would not do so for strangers who are not related to him.

Animals and other creatures incapable of moral action are neutral rather than good or evil.

Law and Chaos

Lawful characters tell the truth, keep their word, respect authority, honor tradition, and judge those who fall short of their duties. Chaotic characters follow their consciences, resent being told what to do, favor new ideas over tradition, and do what they promise if they feel like it.

“Law” implies honor, trustworthiness, obedience to authority, and reliability. On the downside, lawfulness can include close-mindedness, reactionary adherence to tradition, and a lack of adaptability.

“Chaos” implies freedom, adaptability, and flexibility. On the downside, chaos can include recklessness, resentment toward legitimate authority, arbitrary actions, and irresponsibility.

People who are neutral with respect to law and chaos have a normal respect for authority and feel neither a compulsion to obey nor to rebel. They are honest, but can be tempted into lying or deceiving others.

Animals and other creatures incapable of moral action are neutral.

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rules languages

From d20 SDR (e3.0):

Languages

All characters know how to speak Common.

Literacy: Your character can read and write all the languages he or she speaks.

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rules species

Most RPGs include multiple races, an unfortunate choice of terminology harkening back to Gomez de Zurara's invention of racism. Zurara invented the concept of the white race and the black race in 1468 in order to justify the then new trans-Atlantic slave trade business. He had been the chief keeper of the archives and royal chronicler for Portuguese King Afonso V. His book claimed that blackness was the Mark of Cain and that God had assigned the White race to run the lives of the Black race because the Black race was supposedly intellectually inferior and unable to handle their own affairs. He claimed that slavery raised the Black race to a better life than they could possibly have on their own. Roman Catholic Pope Nicolas V endorsed Zurara's book as an accurate depiction of God's will. Among the famous people to use the idea of races was Adolph Hitler.

I recommend that the different possibilities (usually humans, elves, dwarves, and similar fantasy people) be called people or maybe species. Let's remove the overt racism from RPGs.



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dwarf

elf
gnome
half-elf
half-orc
halfling
human

rules

dwarf

From d20 SDR (e3.0):

Dwarf

- **Ability Score Adjustments:** +2 Constitution, -2 Charisma.
- **Size:** Medium.
- **Base speed:** 20 feet.
- **Darkvision:** Dwarves can see in the dark up to 60 feet. Darkvision is black and white only, but it is otherwise like normal sight, and dwarves can function just fine with no light at all.
- **Stonecunning:** Stonecunning grants dwarves a +2 racial bonus on checks to notice unusual stonework, such as sliding walls, stonework traps, new construction (even when built to match the old), unsafe stone surfaces, shaky stone ceilings, and the like. Something that isn't stone but that is disguised as stone also counts as unusual stonework. A dwarf who merely comes within 10 feet of unusual stonework can make a check as if he were actively searching, and a dwarf can use the Search skill to find stonework traps as a rogue can. A dwarf can also intuit depth, sensing his approximate depth underground as naturally as a human can sense which way is up. Dwarves have a sixth sense about stonework, an innate ability that they get plenty of opportunity to practice and hone in their underground homes.
- **Racial Bonus:** +2 on saving throws against poison.
- **Racial Bonus:** +2 on saving throws against spells and spell-like effects.
- **Racial Bonus:** +1 to attack rolls against orcs and goblinoids.
- **Dodge Bonus:** +4 against giants.
- **Racial Bonus:** +2 on Appraise checks that are related to stone or metal items.
- **Racial Bonus:** +2 on Craft checks that are related to stone or metal.
- **Automatic Languages:** Common and Dwarven.
- **Bonus Languages:** Giant, Gnome, Goblin, Orc, Terran, and Undercommon.
- **Favored Class:** Fighter

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rules

elf

From d20 SDR (e3.0):

Elf

- **Ability Score Adjustments:** +2 Dexterity, -2 Constitution.
- **Size:** Medium.
- **Base Speed:** 30 feet.
- **Special Quality:** Immune to magic sleep spells and effects.
- **Racial Bonus:** +2 on saving throws against Enchantment spells or effects.
- **Low-light Vision:** Elves can see twice as far as a human in starlight, moonlight, torchlight, and similar conditions of poor illumination. They retain the ability to distinguish color and detail under these conditions.
- **Proficiencies:** Either longsword or rapier; shortbow, longbow, composite longbow, and composite shortbow.
- **Racial Bonus:** +2 on Listen, Search, and Spot checks. An elf who merely passes within 5 feet of a secret or concealed door is entitled to a Search check to notice it as if she were actively looking for the door.
- **Automatic Languages:** Common and Elven.
- **Bonus Languages:** Draconic, Gnoll, Gnome, Goblin, Orc, and Sylvan.
- **Favored Class:** Wizard.

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rules

gnome

From d20 SDR (e3.0):

Gnome

- **Ability Score Adjustments:** +2 Constitution, -2 Strength.
- **Size:** Small.
- **Base Speed:** 20 feet.
- **Low-light Vision:** Gnomes can see twice as far as a human in starlight, moonlight, torchlight, and similar conditions of poor illumination. They retain the ability to distinguish color and detail under these conditions. * +2 racial bonus on saving throws against illusions.
- **Racial Bonus:** +1 to attack rolls against kobolds and goblinoids (goblins, hobgoblins, and bugbears): Gnomes battle these creatures frequently and practice special techniques for fighting them.
- **Dodge Bonus:** +4 against giants.
- **Racial Bonus:** +2 on Listen checks.
- **Racial Bonus:** +2 on Alchemy checks.
- **Automatic Languages:** Common and Gnome.
- **Bonus Languages:** Draconic, Dwarven, Elven, Giant, Goblin, and Orc.
- **Spell-like Ability:** Once per day a gnome can use *Speak with Animals* [per the spell] as a spell-like ability to speak with a burrowing mammal (a badger, fox, rabbit, etc.). This ability is innate to gnomes. It has a duration of 1 minute (the gnome is considered a 1st-level caster when he uses this ability, regardless of his actual level).
- **Spell-like Ability:** Gnomes with Intelligence scores of 10 or higher may cast the 0-level spells (cantrips) *dancing lights*, *ghost sound*, and *prestidigitation*, each once per day. These are arcane spells. Treat the gnome as a 1st-level caster for all spell effects dependent on level (range for all three spells and duration for ghost sound).
- **Favored Class:** Illusionist, which is a wizard who specializes in casting illusion spells.

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rules

half-elf

From d20 SDR (e3.0):

Half-Elf

- **Size:** Medium.
- **Base Speed:** 30 feet.
- **Special Quality:** Immune to sleep spells and similar magical effects.
- **Racial Bonus:** +2 on saving throws against Enchantment spells or effects.
- **Low-light Vision:** Half-elves can see twice as far as a human in starlight, moonlight, torchlight, and similar conditions of poor illumination. They retain the ability to distinguish color and detail under these conditions.
- **Racial Bonus:** +1 on Listen, Search, and Spot checks.
- **Elven Blood:** For all special abilities and effects, a half-elf is considered an elf.
- **Automatic Languages:** Common and Elven.
- **Bonus Languages:** Any.
- **Favored Class:** Any.

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rules

half-orc

From d20 SDR (e3.0):

Half-Orc

- **Ability Score Adjustments:** +2 Strength, -2 Intelligence, -2 Charisma
- **Size:** Medium.
- **Base Speed:** 30 feet.
- **Darkvision:** Half-orcs (and orcs) can see in the dark up to 60 feet. Darkvision is black and white only, but it is otherwise like normal sight, and half-orcs can function just fine with no light at all.
- **Orc Blood:** For all special abilities and effects, a half-orc is considered an orc.
- **Automatic Languages:** Common and Orc.
- **Bonus Languages:** Draconic, Giant, Gnomish, Goblin, and Abyssal.
- **Favored Class:** Barbarian.

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rules

halfling

From d20 SDR (e3.0):

Halfling

- **Ability Score Adjustments:** +2 Dexterity, -2 Strength.
- **Size:** Small.
- **Base Speed:** 20 feet.
- **Racial Bonus:** +2 on Climb, Jump, and Move Silently checks.
- **Racial Bonus:** +1 on all saving throws.
- **Morale Bonus:** +2 on saving throws against fear.
- **Racial Bonus:** +1 to attack rolls with a thrown weapon.
- **Racial Bonus:** +2 on Listen checks.
- **Automatic Languages:** Common and Halfling.
- **Bonus Languages:** Dwarven, Elven, Gnome, Goblin, and Orc.
- **Favored Class:** Rogue.

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rules

human

From d20 SDR (e3.0):

Human

- **Size:** Medium.
- **Base Speed:** 30 feet.
- **Extra Feat:** 1 extra feat at 1st level.
- **Extra Skill Points:** 4 extra skill points at 1st level and 1 extra skill point at each additional level.
- **Automatic Language:** Common.
- **Bonus Languages:** Any.
- **Favored Class:** Any.

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rules

physical appearance

Some games have rules for physical appearance and some leave the entire physical appearance to each player's imagination.



image by himanshu gunarathna from Pixabay

rules backgrounds

Some games have rules about backgrounds and some RPGS leave the entire background to each player's imagination.



image by Free-Photos from Pixabay

rules

wealth and status

I will get around to examining game rules for wealth and status, but in the meantime I will leave you with a few semi-random thoughts on the topic.



image by Peter H from Pixabay

Profits are the unpaid wages of the working class.

“If you took the most ardent revolutionary, vested him in absolute power, within a year he would be worse than the Tsar himself.” —Mikhail Bakunin

“We are convinced that liberty without socialism is privilege, injustice; and that socialism without liberty is slavery and brutality.” —Mikhail Bakunin

“I ask only one thing of skeptics: don’t bring up Soviet Russia, please. That horrible example of State Capitalism has nothing to do with what I, and other libertarian socialists, would offer as an alternative to the present system.” —Robert Anton Wilson

“With the development of industrial capitalism, a new and unanticipated system of injustice, it is libertarian socialism that has preserved and extended the radical humanist message of the

Enlightenment and the classical liberal ideals that were perverted into an ideology to sustain the emerging social order.” —Noam Chomsky, *Notes on Anarchism*

“Anarchism is not a romantic fable but the hardheaded realization, based on five thousand years of experience, that we cannot entrust the management of our lives to kings, priests, politicians, generals, and county commissioners.” —Edward Abbey

“When enough people understand reality, tyrants can literally be ignored out of existence. They can’t ever be voted out of existence.” —Larken Rose

“It isn’t a coincidence that governments everywhere want to educate children. Government education, in turn, is supposed to be evidence of the state's goodness and its concern for our well-being. The real explanation is less flattering. If the government’s propaganda can take root as children grow up, those kids will be no threat to the state apparatus. They’ll fasten the chains to their own ankles.” —Llewellyn H. Rockwell Jr.

“People who can’t imagine order without imposition always end up favoring power over liberty.” —Jeffrey Tucker

“Politicized science is like a prostitute with an STD.
You know she has been fucked by a dirty politician.” —A.E. Samaan

“If your political theory requires humanity to “evolve”, then you do not have a theory.... you have a dream.” —A.E. Samaan

“What is an anarchist? One who, choosing, accepts the responsibility of choice.” —Ursula K. Le Guin

“Anarchism is not only a stateless society but also a harmonized society that exposes man to the stimuli provided by both agrarian and urban life, to physical activity and mental activity, to unrepressed sensuality and self-directed spirituality, to communal solidarity and individual development, to regional uniqueness and worldwide brotherhood, to spontaneity and self-discipline, to the elimination of toil and the promotion of craftsmanship.” —Murray Bookchin, *Ecology and Revolutionary Thought*

“The older I get, the more of an anarchist I become, and I don’t mean in a punk rock way.” —Killer Mike

“Beware of your contribution to the growing banality of evil lest you yourself become a cog in the machinery of terror.” —Heather Marsh, *The Creation of Me, Them and Us*

“An anarchist is not someone who favors chaos but someone who favors the total liberation of the world through the abolition of capitalism, government, and all other forms of oppressive authority, to be replaced by any number of other social arrangements, proven or utopian.” —Peter Gelderloos, *How Nonviolence Protects the State*

“You cannot buy the revolution. You cannot make the revolution. You can only be the revolution. It is in your spirit, or it is nowhere.” —Ursula K. Le Guin, *The Dispossessed*

“People have only as much liberty as they have the intelligence to want and the courage to take.” —Emma Goldman

“Our masters have not heard the people’s voice for generations and it is much, much louder than they care to remember.” —Alan Moore, *V for Vendetta*

“Your pretty empire took so long to build, now, with a snap of history's fingers, down it goes.” —Alan Moore, *V for Vendetta*

“Authority, when first detecting chaos at its heels, will entertain the vilest schemes to save its orderly facade.” —Alan Moore, *V for Vendetta*

“Anarchism is founded on the observation that since few men are wise enough to rule themselves, even fewer are wise enough to rule others.” —Edward Abbey

“The individual cannot bargain with the State. The State recognizes no coinage but power: and it issues the coins itself.” —Ursula K. Le Guin, *The Dispossessed*

“Anarchism is democracy taken seriously.” —Edward Abbey

rules

classes

Dungeons & Dragons divided an adventuring team into character classes. Each character class had a specific role in the adventuring party, encouraging every player to have an equal part in the adventure and the fun.

From the Wikipedia page on [Character class \(*Dungeons & Dragons*\)](#)

Character class (*Dungeons & Dragons*)

A **character class** is a fundamental part of the identity and nature of characters in the *Dungeons & Dragons* role-playing game. A character's capabilities, strengths, and weaknesses are largely defined by their class; choosing a class is one of the first steps a player takes to create a *Dungeons & Dragons* player character. A character's class affects a character's available skills and abilities. A well-rounded party of characters requires a variety of abilities offered by the classes found within the game.

Dungeons & Dragons was the first game to introduce the usage of character classes to role-playing. Many other traditional role-playing games and massively multiplayer online role-playing games have since adopted the concept as well. *Dungeons & Dragons* classes have generally been defined in the Player's Handbook, one of the three core rulebooks; a variety of alternate classes have also been defined in supplemental sourcebooks.

Classes by type

Principle base classes

These classes have appeared as character classes in the core books of multiple published editions:

- Barbarian
- Bard
- Cleric
- Druid
- Fighter

- Monk
- Paladin
- Ranger
- Rogue
- Sorcerer
- Warlock
- Wizard

Alternate base classes

While the main character classes available have remained fairly consistent since the 1st edition of *Advanced Dungeons & Dragons*, a variety of alternate base classes have been offered in supplemental books. The release of *Unearthed Arcana* in 1985, for instance, introduced the base class of Barbarian and reworked Paladins to be a type of the new base class Cavalier. *Oriental Adventures* also introduced a number of alternate classes more appropriate for an Eastern setting. The 2nd edition added several completely new base classes (e.g. Runecaster and Shaman); in addition, supplemental handbooks offered a variety of “kits” to customize each base class, and the *Dungeon Master's Guide* offered rules for creating new character classes. The 3rd edition introduced five classes for use in creating non-player characters in its *Dungeon Master's Guide*.

Non-core base classes are considered optional and do not always exist in all settings. For example, the Samurai class introduced in the *Oriental Adventures* book may not make sense in a game set in a standard European-style realm. Similarly, classes associated with psionics such as the Psychic Warrior don't apply to worlds without psionics.

Multiclassing

Most editions of *Dungeons & Dragons* have allowed for the possibility to either advance in more than one class simultaneously, alternately taking levels in more than one class, or branching out in a second (or more) class at a specific point defined by the first class, a concept generally called multiclassing.

In the 1st and 2nd editions, changing a character's class is difficult. Only those playing as humans can, and it requires extremely high stats to do so. This is called “dual-classing”. Non-humans, on the other hand, can “multiclass” where they effectively learn two (or rarely even three) classes at the same time at the cost of a slower character level progression.

3rd edition allows players to mix and match levels from any number of classes, though certain combinations are more effective than others. In addition, Prestige classes add more options for multiclassing. This edition offers the most freedom regarding multiclassing. There are, however, penalties to the rate of experience point gained if classes are added haphazardly. The 3rd edition version of *Unearthed Arcana* includes rules for gestalt characters which combine the advantages of two classes.

The 4th edition allows characters to take a feat that grants access to specific facets of another class. The class-specific multiclass feats are also prerequisites for the power-swap feats, each of which allows the character to swap out a daily, encounter, or utility power from their first class for one from their second class. Also, at level 11, a character with a multiclass feat and all of the power-swap feats is eligible for paragon multiclassing, which allows them to gain additional powers from their second class in lieu of taking a Paragon Path. Some classes are only available through multiclassing; the first such class was Spellscarred, introduced in the *Forgotten Realms Player's Guide*. In the 4th edition, each character can only multiclass into a single class, unless otherwise stated by their primary class (such as the Bard). The *Player's Handbook III* introduced "hybrid" classes, a deeper form of multiclassing in which elements of two classes are combined each level.

In the 5th edition, multiclassing requires minimum ability scores before it can be chosen; however, the requirements are not as steep as in previous editions. The core classes only require an ability score of 13 or greater in the specific requisite score, except for the Monk, Paladin and Ranger (who need 13s in two stats).

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rules

multi-classing

Some class-based RPGs allow a player character to have more than one class. This is called multi-classing.

From the Wikipedia page on [Character class \(*Dungeons & Dragons*\)](#)

Multiclassing

Most editions of *Dungeons & Dragons* have allowed for the possibility to either advance in more than one class simultaneously, alternately taking levels in more than one class, or branching out in a second (or more) class at a specific point defined by the first class, a concept generally called multiclassing.

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rules

basic classes

From d20 SDR (e3.0):

Basic Classes

The Basic Character Classes have the following attributes:

Alignment

A few classes restrict a character's possible alignments. An entry of "Any" means that characters of this class are not restricted in alignment.

Hit Die

The type of Hit Die used by characters of the class determines the number of hit points gained per level.

Class Table

This table details how a character improves as he or she gains experience levels. Class tables typically include the following:

- **Level:** The character's level in that class.
- **Base Attack Bonus:** The character's base attack bonus and number of attacks.
- **Fort Save:** The base save bonus on Fortitude saving throws. The character's Constitution modifier also applies.
- **Ref Save:** The base save bonus on Reflex saving throws. The character's Dexterity modifier also applies.
- **Will Save:** The base save bonus on Will saving throws. The character's Wisdom modifier also applies.
- **Special:** Level-dependent class abilities, each explained in the "Class Features" sections that follow.

Class Skills

The number of skill points the character starts with at 1st level, the number of skill points gained each level thereafter, and the list of class skills.

Class Features

Special characteristics of the class. When applicable, this section also mentions restrictions and disadvantages of the class. Class features include some or all of the

following:

- **Weapon and Armor Proficiency:** Which weapons and armor types the character is proficient with.
- **Other Features:** Each class has certain unique capabilities.
- **Ex-Members:** If, for some reason, a character is forced to give up this class, these are the rules for what happens.
- **Spells per Day:** How many spells of each spell level the character can cast each day. If the entry is “—” for a given level of spells, the character may not cast any spells of that level. If the entry is “0,” the character may only cast spells of that level if he or she has bonus spells. If the entry is a number, the character may cast that many spells plus any bonus spells. Bonus spells for wizards are based on Intelligence. Bonus spells for clerics, druids, paladins, and rangers are based on Wisdom. Bonus spells for sorcerers and bards are based on Charisma. A character can always choose to memorize a lower-level spell to fill a higher-level slot.

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rules

barbarian

From d20 SDR (e3.0):

Barbarian

Alignment: Any nonlawful

Hit Die: d12

Class Skills: The barbarian's class skills (and the key ability for each skill) are Climb (Str), Craft (Int), Handle Animal (Cha), Intimidate (Cha), Intuit Direction (Wis), Jump (Str), Listen (Wis), Ride (Dex), Swim (Str), and Wilderness Lore (Wis).

Weapon and Armor Proficiency: A barbarian is proficient with all simple and martial weapons, light armor, medium armor, and shields.

Table: Barbarian

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+2	+0	+0	Rage 1/day; fast movement
2	+2	+3	+0	+0	Uncanny dodge (Dex bonus to AC)
3	+3	+3	+1	+1	
4	+4	+4	+1	+1	Rage 2/day
5	+5	+4	+1	+1	Uncanny dodge (can't be flanked)
6	+6/+1	+5	+2	+2	
7	+7/+2	+5	+2	+2	
8	+8/+3	+6	+2	+2	Rage 3/day
9	+9/+4	+6	+3	+3	
10	+10/+5	+7	+3	+3	Uncanny dodge (+1 against traps)
11	+11/+6/+1	+7	+3	+3	Damage reduction 1/-
12	+12/+7/+2	+8	+4	+4	Rage 4/day
13	+13/+8/+3	+8	+4	+4	Uncanny dodge (+2 against traps)
14	+14/+9/+4	+9	+4	+4	Damage reduction 2/-
15	+15/+10/+5	+9	+5	+5	Greater rage
16	+16/+11/+6/+1	+10	+5	+5	Rage 5/day, uncanny dodge (+3 against traps)
17	+17/+12/+7/+2	+10	+5	+5	Damage reduction 3/-
18	+18/+13/+8/+3	+11	+6	+6	
19	+19/+14/+9/+4	+11	+6	+6	Uncanny dodge (+4 against traps)
20	+20/+15/+10/+5	+12	+6	+6	Rage 6/day; no longer winded after rage; damage reduction 4/-

Barbarian Rage: Barbarian temporarily gains +4 to Strength, +4 to Constitution, and a +2 morale bonus on Will saves, but suffers a -2 penalty to AC.

The increase in Constitution increases the barbarian's hit points by 2 points per level, but these hit points go away at the end of the rage when the Constitution score drops back to normal. While raging, a barbarian cannot use skills or abilities that require patience and concentration. (The only class skills he can't use while raging are Craft,

Handle Animal, and Intuit Direction.) He can use any feat he might have except for Expertise, item creation feats, metamagic feats, and Skill Focus (if it's tied to a skill that requires patience or concentration).

A fit of rage lasts for a number of rounds equal to 3 + the character's (newly improved) Constitution modifier. The barbarian may prematurely end the rage voluntarily. At the end of the rage, the barbarian is fatigued (-2 to Strength, -2 to Dexterity, can't charge or run) for the duration of that encounter (unless the barbarian is 20th level, when this limitation no longer applies). The barbarian can only fly into a rage once per encounter, and only a certain number of times per day (determined by level). Entering a rage takes no time itself, but the barbarian can only do it during his action.

Starting at 15th level, the barbarian's rage bonuses become +6 to Strength, +6 to Constitution, and a morale bonus to Will saves. (The AC penalty remains at -2.)

Fast Movement: The barbarian has a speed faster than the norm for his race by +10 feet when wearing no armor, light armor, or medium armor (and not carrying a heavy load).

Uncanny Dodge: At 2nd level and above, the barbarian retains his Dexterity bonus to AC (if any) if caught flat-footed or struck by an invisible attacker.

At 5th level, the barbarian can no longer be flanked. The exception to this defense is that a rogue at least four levels higher than the barbarian can still flank.

At 10th level, the barbarian gains a +1 bonus to Reflex saves made to avoid traps and a +1 dodge bonus to AC against attacks by traps. At 13th level, these bonuses rise to +2. At 16th, they rise to +3, and at 19th they rise to +4.

Damage Reduction: Starting at 11th level, the barbarian gains the extraordinary ability to shrug off some amount of injury from each blow or attack. Subtract 1 from the damage the barbarian takes each time the barbarian is dealt damage. At 14th level, this damage reduction rises to 2. At 17th, it rises to 3. At 20th, it rises to 4. Damage reduction can reduce damage to 0 but not below 0.

Illiteracy: Barbarians are the only characters that do not automatically know how to read and write. A barbarian must spend 2 skill points to gain the ability to read and write any language the barbarian is able to speak.

Ex-Barbarians: A barbarian who becomes lawful loses the ability to rage and cannot gain more levels as a barbarian. The barbarian retains all the other benefits of the class.

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rules

bard

From d20 SDR (e3.0):

Bard

Alignment: Any nonlawful
Hit Die: d6

Class Skills: The bard's class skills (and the key ability for each skill) are Alchemy (Int), Appraise (Int), Balance (Dex), Bluff (Cha), Climb (Str), Concentration (Con), Craft (Int), Decipher Script (Int, exclusive skill), Diplomacy (Cha), Disguise (Cha), Escape Artist (Dex), Gather Information (Cha), Hide (Dex), Intuit Direction (Wis), Jump (Str), Knowledge (all skills, taken individually) (Int), Listen (Wis), Move Silently (Dex), Perform (Cha), Pick Pocket (Dex), Profession (Wis), Scry (Int, exclusive skill), Sense Motive (Wis), Speak Language (Int), Spellcraft (Int), Swim (Str), Tumble (Dex), and Use Magic Device (Cha, exclusive skill).

Weapon and Armor Proficiency: A bard is proficient with all simple weapons. Additionally, the bard is proficient with one of the following weapons: longbow, composite longbow, longsword, rapier, sap, short composite bow, short sword, shortbow, or whip. Bards are proficient with light armor, medium armor, and shields.

Table: Bard

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+2	+2	Bardic music, bardic knowledge
2	+1	+0	+3	+3	
3	+2	+1	+3	+3	
4	+3	+1	+4	+4	
5	+3	+1	+4	+4	
6	+4	+2	+5	+5	
7	+5	+2	+5	+5	
8	+6/+1	+2	+6	+6	
9	+6/+1	+3	+6	+6	
10	+7/+2	+3	+7	+7	
11	+8/+3	+3	+7	+7	
12	+9/+4	+4	+8	+8	
13	+9/+4	+4	+8	+8	
14	+10/+5	+4	+9	+9	
15	+11/+6/+1	+5	+9	+9	
16	+12/+7/+2	+5	+10	+10	
17	+12/+7/+2	+5	+10	+10	
18	+13/+8/+3	+6	+11	+11	
19	+14/+9/+4	+6	+11	+11	
20	+15/+10/+5	+6	+12	+12	

Table: Bard Spells Per Day

Level	0	1st	2nd	3rd	4th	5th	6th
1	2	—	—	—	—	—	—
2	3	0	—	—	—	—	—
3	3	1	—	—	—	—	—
4	3	2	0	—	—	—	—
5	3	3	1	—	—	—	—
6	3	3	2	—	—	—	—
7	3	3	2	0	—	—	—
8	3	3	3	1	—	—	—
9	3	3	3	2	—	—	—
10	3	3	3	2	0	—	—
11	3	3	3	3	1	—	—
12	3	3	3	3	2	—	—
13	3	3	3	3	2	0	—
14	4	3	3	3	3	1	—
15	4	4	3	3	3	2	—
16	4	4	4	3	3	2	0
17	4	4	4	4	3	3	1
18	4	4	4	4	4	3	2
19	4	4	4	4	4	4	3
20	4	4	4	4	4	4	4

Table: Bard Spells Known

Level	0	1st	2nd	3rd	4th	5th	6th
1	4	—	—	—	—	—	—
2	5	2*	—	—	—	—	—
3	6	3	—	—	—	—	—
4	6	3	2*	—	—	—	—
5	6	4	3	—	—	—	—
6	6	4	3	—	—	—	—
7	6	4	4	2*	—	—	—
8	6	4	4	3	—	—	—
9	6	4	4	3	—	—	—
10	6	4	4	4	2*	—	—
11	6	4	4	4	3	—	—
12	6	4	4	4	3	—	—
13	6	4	4	4	4	2*	—
14	6	4	4	4	4	3	—
15	6	4	4	4	4	3	—
16	6	5	4	4	4	4	2*
17	6	5	5	4	4	4	3
18	6	5	5	5	4	4	3
19	6	5	5	5	5	4	4
20	6	5	5	5	5	5	4

*Provided the bard has sufficient Charisma to have a bonus spell of this level.

Spells: A bard casts arcane spells. The bard casts these spells without needing to memorize them beforehand or keep a spellbook. Bards receive bonus spells for high Charisma, and to cast a spell a bard must have a Charisma score at least equal to 10 + the level of the spell. The Difficulty Class for a saving throw against a bard's spell is 10 + the spell's level + the bard's Charisma modifier.

Bardic Music: Once per day per level, a bard can use song or poetics to produce magical effects on those around him or her. While these abilities fall under the category of bardic music, they can include reciting poetry, chanting, singing lyrical songs, singing

melodies, whistling, playing an instrument, or playing an instrument in combination with some spoken performance. As with casting a spell with a verbal component, a deaf bard suffers a 20% chance to fail with bardic music. If the bard fails, the attempt still counts against the daily limit.

The Bardic Music effects are:

- **Inspire Courage:** A bard with 3 or more ranks in Perform can to inspire courage in his or her allies. To be affected, an ally must hear the bard sing for a full round. The effect lasts as long as the bard sings and for 5 rounds after the bard stops singing (or 5 rounds after the ally can no longer hear the bard). While singing, the bard can fight but cannot cast spells, activate magic items by spell completion (such as scrolls), or activate magic items by magic word (such as wands). Affected allies receive a +2 morale bonus to saving throws against charm and fear effects and a +1 morale bonus to attack and weapon damage rolls. Inspire courage is a supernatural, mind-affecting ability.
- **Countersong:** A bard with 3 or more ranks in Perform can counter magical effects that depend on sound (but not spells that simply have verbal components). As with inspire courage, a bard may sing, play, or recite a countersong while taking other mundane actions, but not magical actions. Each round of the countersong, the bard makes a Perform check. Any creature within 30 feet of the bard (including the bard) who is affected by a sonic or language-dependent magical attack may use the bard's Perform check result in place of his saving throw if, after rolling the saving throw, the Perform check result proves to be better. The bard may keep up the countersong for 10 rounds. Countersong is a supernatural ability.
- **Fascinate:** A bard with 3 or more ranks in Perform can cause a single creature to become fascinated with him. The creature to be fascinated must be able to see and hear the bard and must be within 90 feet. The bard must also see the creature. The creature must be able to pay attention to the bard. The distraction of a nearby combat or other dangers prevents the ability from working. The bard makes a Perform check, and the target can negate the effect with a Will saving throw equal to or greater than the bard's check result. If the saving throw succeeds, the bard cannot attempt to fascinate that creature again for 24 hours. If the saving throw fails, the creature sits quietly and listens to the song for up to 1 round per level of the bard. While fascinated, the target's Spot and Listen checks suffer a -4 penalty. Any potential threat (such as an ally of the bard moving behind the fascinated creature) allows the fascinated creature a second saving throw against a new Perform check result. Any obvious threat, such as casting a spell, drawing a sword, or aiming, automatically breaks the effect.

While fascinating (or attempting to fascinate) a creature, the bard must concentrate, as if casting or maintaining a spell. Fascinate is a spell-like, mind-affecting charm ability.

- **Inspire Competence:** A bard with 6 or more ranks in Perform can help an ally succeed at a task. The ally must be able to see and hear the bard and must be within 30 feet. The bard must also see the creature. The ally gets a +2 competence bonus on his skill checks with a particular skill as long as he or she continues to hear the bard's music. The DM may rule that certain uses of this ability are infeasible. The bard can maintain the effect for 2 minutes (long enough for the ally to take 20). Inspire competence is a supernatural, mind-affecting ability.
- **Suggestion:** A bard with 9 or more ranks in Perform can make a suggestion (as the spell) to a creature that he has already fascinated (see above). The suggestion doesn't count against the bard's daily limit on bardic music performances (one per day per level), but the fascination does. A Will saving throw (DC 13 + the bard's Charisma modifier) negates the effect. Suggestion is a spell-like, mind-affecting charm ability.
- **Inspire Greatness:** A bard with 12 or more ranks in Perform can inspire greatness in another creature. For every three levels the bard attains beyond 9th, the bard can inspire greatness in one additional creature. To inspire greatness, the bard must sing and the creature must hear

the bard sing for a full round, as with inspire courage. The creature must also be within 30 feet. A creature inspired with greatness gains temporary Hit Dice, attack bonuses, and saving throw bonuses as long as he or she hears the bard continue to sing and for 5 rounds thereafter. (All these bonuses are competence bonuses.)

The target gains the following boosts:

- +2 Hit Dice (d10s that grant temporary hit points).
- +2 competence bonus on attacks.
- +1 competence bonus on Fortitude saves.

Apply the target's Constitution modifier, if any, to each bonus Hit Die. These extra Hit Dice count as regular Hit Dice for determining effects such as the sleep spell. Inspire greatness is a supernatural, mind-affecting enchantment ability.

Bardic Knowledge: A bard may make a special bardic knowledge check with a bonus equal to his level + his Intelligence modifier to see whether he knows some relevant information about local notable people, legendary items, or noteworthy places. This check will not reveal the powers of a magic item but may give a hint as to its general function. The bard may not take 10 or take 20 on this check; this sort of knowledge is essentially random. The DM will determine the Difficulty Class of the check by referring to the table below.

DC	Type of Knowledge
10	Common, known by at least a substantial minority of the local population.
20	Uncommon but available, known by only a few people in the area.
25	Obscure, known by few, hard to come by.
30	Extremely obscure, known by very few, possibly forgotten by most who once knew it, possibly known only by those who don't understand the significance of the knowledge.

Ex-Bards: A bard who becomes lawful in alignment cannot progress in levels as a bard, though he retains all his bard abilities.

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rules

cleric

From d20 SDR (e3.0):

Cleric

Alignment: If the Cleric serves a specific deity the cleric’s alignment must be within one step of his deity’s, and it may not be neutral unless the deity’s alignment is neutral. Choosing to serve a specific deity is optional.

Hit Die: d8

Class Skills: The cleric’s class skills (and the key ability for each skill) are Concentration (Con), Craft (Int), Diplomacy (Cha), Heal (Wis), Knowledge (arcana) (Int), Knowledge (religion) (Int), Profession (Wis), Scry (Int, exclusive skill), and Spellcraft (Int).

Domains and Class Skills: A cleric who chooses Animal or Plant as one of his domains also has Knowledge (nature) (Int) as a class skill. A cleric who chooses Knowledge as one of his domains also has all Knowledge (Int) skills as class skills. A cleric who chooses Travel as one of his domains also has Wilderness Lore as a class skill. A cleric who chooses Trickery as one of his domains also has Bluff (Cha), Disguise (Cha), and Hide (Dex) as class skills. See Deity, Domains, and Domain Spells, below, for more information.

Armor and Weapon Proficiency: Clerics are proficient with all simple weapons. Clerics are proficient with all types of armor (light, medium, and heavy) and with shields. Note that armor check penalties for armor heavier than leather apply to the skills Balance, Climb, Escape Artist, Hide, Jump, Move Silently, Pick Pocket, and Tumble.

Some deities have favored weapons, and clerics consider it a point of pride to wield them. A cleric whose deity’s favored weapon is a martial weapon and who chooses War as one of his domains receives the Martial Weapon Proficiency feat related to that weapon for free, as well as the Weapon Focus feat related to that weapon.

Table: Cleric

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+2	+0	+2	Turn or rebuke undead
2	+1	+3	+0	+3	
3	+2	+3	+1	+3	
4	+3	+4	+1	+4	
5	+3	+4	+1	+4	
6	+4	+5	+2	+5	
7	+5	+5	+2	+5	
8	+6/+1	+6	+2	+6	
9	+6/+1	+6	+3	+6	

10	+7/+2	+7	+3	+7
11	+8/+3	+7	+3	+7
12	+9/+4	+8	+4	+8
13	+9/+4	+8	+4	+8
14	+10/+5	+9	+4	+9
15	+11/+6/+1	+9	+5	+9
16	+12/+7/+2	+10	+5	+10
17	+12/+7/+2	+10	+5	+10
18	+13/+8/+3	+11	+6	+11
19	+14/+9/+4	+11	+6	+11
20	+15/+10/+5	+12	+6	+12

Table: Cleric Spells Per Day*

Level	0	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	3	1+1	—	—	—	—	—	—	—	—
2	4	2+1	—	—	—	—	—	—	—	—
3	4	2+1	1+1	—	—	—	—	—	—	—
4	5	3+1	2+1	—	—	—	—	—	—	—
5	5	3+1	2+1	1+1	—	—	—	—	—	—
6	5	3+1	3+1	2+1	—	—	—	—	—	—
7	6	4+1	3+1	2+1	1+1	—	—	—	—	—
8	6	4+1	3+1	3+1	2+1	—	—	—	—	—
9	6	4+1	4+1	3+1	2+1	1+1	—	—	—	—
10	6	4+1	4+1	3+1	3+1	2+1	—	—	—	—
11	6	5+1	4+1	4+1	3+1	2+1	1+1	—	—	—
12	6	5+1	4+1	4+1	3+1	3+1	2+1	—	—	—
13	6	5+1	5+1	4+1	4+1	3+1	2+1	1+1	—	—
14	6	5+1	5+1	4+1	4+1	3+1	3+1	2+1	—	—
15	6	5+1	5+1	5+1	4+1	4+1	3+1	2+1	1+1	—
16	6	5+1	5+1	5+1	4+1	4+1	3+1	3+1	2+1	—
17	6	5+1	5+1	5+1	5+1	4+1	4+1	3+1	2+1	1+1
18	6	5+1	5+1	5+1	5+1	4+1	4+1	3+1	3+1	2+1
19	6	5+1	5+1	5+1	5+1	5+1	4+1	4+1	3+1	3+1
20	6	5+1	5+1	5+1	5+1	5+1	4+1	4+1	4+1	4+1

* In addition to the stated number of spells per day for 1st- through 9th-level spells, a cleric gets a domain spell for each spell level, starting at 1st. The “+1” on this list represents that. These spells are in addition to any bonus spells for having a high Wisdom.

Spells: A cleric casts divine spells. A cleric may prepare and cast any spell on the cleric spell list, provided he can cast spells of that level. The Difficulty Class for a saving throw against a cleric’s spell is 10 + the spell’s level + the cleric’s Wisdom modifier. Each cleric must choose a time at which he must spend an hour each day in quiet contemplation or supplication to regain his daily allotment of spells. Time spent resting has no effect on whether a cleric can prepare spells.

In addition to his standard spells, a cleric gets one domain spell of each spell level, starting at 1st. When a cleric prepares a domain spell, it must come from one of his two domains.

Deity, Domains, and Domain Spells: When your character becomes a Cleric, you may choose to have your character serve a specific deity. The cleric’s deity influences his alignment, what magic he can perform, his values, and how others see him.

Choose two from among the deity’s domains for your cleric’s domains. You can only select an alignment domain (such as Good) for your cleric if his alignment matches that

domain.

If your cleric is not devoted to a particular deity, you still select two domains to represent his spiritual inclinations and abilities (but the restriction on alignment domains still applies).

Each domain gives your cleric access to a domain spell at each spell level, from 1st on up, as well as a granted power. Your cleric gets the granted powers of all the domains selected. With access to two domain spells at a given spell level, a cleric prepares one or the other each day. If a domain spell is not on the Cleric Spells list, a cleric can only prepare it in his domain slot.

Spontaneous Casting: Good clerics (and neutral clerics of good deities) can channel stored spell energy into healing spells that they haven't prepared ahead of time. The cleric can "lose" a prepared spell in order to cast any cure spell of the same level or lower (a cure spell is any spell with "cure" in its name).

An evil cleric (or a neutral cleric of an evil deity), on the other hand, can't convert prepared spells to cure spells but can convert them to inflict spells (an inflict spell is one with "inflict" in the title).

A cleric who is neither good nor evil and whose deity is neither good nor evil can convert spells either to cure spells or to inflict spells (player's choice), depending on whether the cleric is more proficient at wielding positive or negative energy. Once the player makes this choice, it cannot be reversed. This choice also determines whether the neutral cleric turns or commands undead (see below).

A cleric can't use spontaneous casting to convert domain spells into cure or inflict spells. These spells arise from the particular powers of the cleric's deity, not divine energy in general.

Chaotic, Evil, Good, and Lawful Spells: A cleric can't cast spells of an alignment opposed to his own or to his deity's.

Turn or Rebuke Undead: A good cleric (or a neutral cleric who worships a good deity) has the supernatural ability to turn undead. Evil clerics (and neutral clerics who worship evil deities) can rebuke such creatures. Neutral clerics of neutral deities can do one or the other (player's choice), depending on whether the cleric is more proficient at wielding positive or negative energy. Once the player makes this choice, it cannot be reversed. This choice also determines whether the neutral cleric can cast spontaneous cure or inflict spells (see above).

A cleric may attempt to turn or rebuke undead a number of times per day equal to three plus his Charisma modifier.

Extra Turning: As a feat, a cleric may take Extra Turning. This feat allows the cleric to turn undead four more times per day than normal. A cleric can take this feat multiple times, gaining four extra daily turning attempts each time.

Bonus Languages: A cleric's list of bonus languages includes Celestial, Abyssal,

and Infernal, in addition to the bonus languages available to the character because of his race.

Ex-Clerics: A cleric who grossly violates the code of conduct expected by his god (generally acting in ways opposed to the god's alignment or purposes) loses all spells and class features and cannot gain levels as a cleric of that god until he atones.

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rules

druid

From d20 SDR (e3.0):

Druid

Alignment: Neutral good, lawful neutral, neutral, chaotic neutral, or neutral evil.
Hit Die: d8

Class Skills: The druid's class skills (and the key ability for each skill) are Animal Empathy (Cha, exclusive skill), Concentration (Con), Craft (Int), Diplomacy (Cha), Handle Animal (Cha), Heal (Wis), Intuit Direction (Wis), Knowledge (nature) (Int), Profession (Wis), Scry (Int, exclusive skill), Spellcraft (Int), Swim (Str), and Wilderness Lore (Wis).

Weapon and Armor Proficiency: Druids are proficient with the following weapons: club, dagger, dart, halfspear, longspear, quarterstaff, scimitar, sickle, shortspear, and sling. Their spiritual oaths prohibit them from using weapons other than these. They are proficient with light and medium armors but are prohibited from wearing metal armor (thus, they may wear only padded, leather, or hide armor). They are skilled with shields but must use only wooden ones.

A druid who wears prohibited armor or wields a prohibited weapon is unable to use any of her magical powers while doing so and for 24 hours thereafter. (Note: A druid can use wooden items that have been altered by the ironwood spell so that they function as though they were steel.)

Table: Druid

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+2	+0	+2	Nature sense, animal companion
2	+1	+3	+0	+3	Woodland stride
3	+2	+3	+1	+3	Trackless step
4	+3	+4	+1	+4	Resist nature's lure
5	+3	+4	+1	+4	Wild shape (1/day)
6	+4	+5	+2	+5	Wild shape (2/day)
7	+5	+5	+2	+5	Wild shape (3/day)
8	+6/	+6	+2	+6	Wild shape (Large)
9	+6/	+6	+3	+6	Venom immunity
10	+7/+2	+7	+3	+7	Wild shape (4/day)
11	+8/+3	+7	+3	+7	Wild shape (Tiny)
12	+9/+4	+8	+4	+8	Wild shape (Dire)
13	+9/+4	+8	+4	+8	A thousand faces
14	+10/+5	+9	+4	+9	Wild shape (5/day)
15	+11/+6/	+9	+5	+9	Wild shape (Huge), timeless body
16	+12/+7/+2	+10	+5	+10	Wild shape (elemental 1/day)
17	+12/+7/+2	+10	+5	+10	
18	+13/+8/+3	+11	+6	+11	Wild shape (6/day, elemental 3/day)

19	+14/+9/+4	+11	+6	+11	
20	+15/+10/+5	+12	+6	+12	

Table: Druid Spells Per Day

Level	0	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	3	1	—	—	—	—	—	—	—	—
2	4	2	—	—	—	—	—	—	—	—
3	4	2	1	—	—	—	—	—	—	—
4	5	3	2	—	—	—	—	—	—	—
5	5	3	2	1	—	—	—	—	—	—
6	5	3	3	2	—	—	—	—	—	—
7	6	4	3	2	1	—	—	—	—	—
8	6	4	3	3	2	—	—	—	—	—
9	6	4	4	3	2	1	—	—	—	—
10	6	4	4	3	3	2	—	—	—	—
11	6	5	4	4	3	2	1	—	—	—
12	6	5	4	4	3	3	2	—	—	—
13	6	5	5	4	4	3	2	1	—	—
14	6	5	5	4	4	3	3	2	—	—
15	6	5	5	5	4	4	3	2	1	—
16	6	5	5	5	4	4	3	3	2	—
17	6	5	5	5	5	4	4	3	2	1
18	6	5	5	5	5	4	4	3	3	2
19	6	5	5	5	5	5	4	4	3	3
20	6	5	5	5	5	5	4	4	4	4

Spells: A druid casts divine spells. A druid may prepare and cast any spell on the druid spell list provided she can cast spells of that level. She prepares and casts spells the way a cleric does (though she cannot lose a prepared spell to cast a cure spell in its place). To prepare or cast a spell, a druid must have a Wisdom score of at least 10 + the spell's level. The Difficulty Class for a saving throw against a druid's spell is 10 + the spell's level + the druid's Wisdom modifier. Bonus spells for druids are based on Wisdom. Chaotic, Evil, Good, and Lawful Spells: A druid can't cast spells of an alignment opposed to her own.

Bonus Languages: A druid may substitute Sylvan for one of the bonus languages available to her. In addition, a druid knows the Druidic language. This secret language is known only to druids, and druids are forbidden from teaching it to nondruids. Druidic has its own alphabet.

Nature Sense: A druid can identify plants and animals (their species and special traits) with perfect accuracy. The druid can determine whether water is safe to drink or dangerous.

Animal Companion: A 1st-level druid may begin play with an animal companion. This animal is one that the druid has befriended with the spell animal friendship.

Woodland Stride: Starting at 2nd level, a druid may move through natural thorns, briars, overgrown areas, and similar terrain at his or her normal speed and without suffering damage or other impairment. However, thorns, briars, and overgrown areas that are enchanted or magically manipulated to impede motion still affect the druid.

Trackless Step: Starting at 3rd level, a druid leaves no trail in natural surroundings

and cannot be tracked.

Resist Nature's Lure: Starting at 4th level, a druid gains a +4 bonus to saving throws against the spell-like abilities of feys.

Wild Shape: At 5th level, a druid gains the spell-like ability to polymorph self into a Small or Medium-size animal (but not a dire animal) and back again once per day. Unlike the standard use of the spell, however, the druid may only adopt one form. As stated in the spell description, the druid regains hit points as if he or she has rested for a day. The druid does not risk the standard penalty for being disoriented while in the wild shape.

The druid can use this ability more times per day at 6th, 7th, 10th, 14th, and 18th level, as noted. In addition, the druid gains the ability to take the shape of a Large animal at 8th level, a Tiny animal at 11th level, and a Huge animal at 15th level. At 12th level or higher, she can take the form of a dire animal.

At 16th level or higher, the druid may use wild shape to change into a Small, Medium-size, or Large air, earth, fire, or water elemental once per day. The druid gains all the elemental's special abilities. At 18th level, the druid can do this three times per day.

Venom Immunity: At 9th level, a druid gains immunity to all organic poisons, including monster poisons but not mineral poisons or poison gas.

A Thousand Faces: At 13th level, a druid gains the supernatural ability to change his or her appearance at will, as if using the spell alter self.

Timeless Body: After achieving 15th level, a druid no longer suffers ability penalties for aging and cannot be magically aged. Any penalties she may have already suffered, however, remain in place. Bonuses still accrue, and the druid still dies of old age when her time is up.

Ex-Druids: A druid who ceases to revere nature or who changes to a prohibited alignment loses all spells and druidic abilities and cannot gain levels as a druid until she atones.

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rules fighter

From d20 SDR (e3.0):

Fighter

Alignment: Any

Hit Die: d10

Class Skills: The fighter's class skills (and the key ability for each skill) are Climb (Str), Craft (Int), Handle Animal (Cha), Jump (Str), Ride (Dex), and Swim (Str).

Weapon and Armor Proficiency: The fighter is proficient in the use of all simple and martial weapons and all armor (heavy, medium, and light) and shields.

Table: Fighter

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+2	+0	+0	Bonus feat
2	+2	+3	+0	+0	Bonus feat
3	+3	+3	+1	+1	
4	+4	+4	+1	+1	Bonus feat
5	+5	+4	+1	+1	
6	+6/+1	+5	+2	+2	Bonus feat
7	+7/+2	+5	+2	+2	
8	+8/+3	+6	+2	+2	Bonus feat
9	+9/+4	+6	+3	+3	
10	+10/+5	+7	+3	+3	Bonus feat
11	+11/+6/+1	+7	+3	+3	
12	+12/+7/+2	+8	+4	+4	Bonus feat
13	+13/+8/+3	+8	+4	+4	
14	+14/+9/+4	+9	+4	+4	Bonus feat
15	+15/+10/+5	+9	+5	+5	
16	+16/+11/+6/+1	+10	+5	+5	Bonus feat
17	+17/+12/+7/+2	+10	+5	+5	
18	+18/+13/+8/+3	+11	+6	+6	Bonus feat
19	+19/+14/+9/+4	+11	+6	+6	
20	+20/+15/+10/+5	+12	+6	+6	Bonus feat

Bonus Feats: At 1st level, the fighter gets a bonus feat in addition to the feat that any 1st-level character gets and the bonus feat granted to humans. The fighter gains an additional bonus feat at 2nd level and every two levels thereafter (4th, 6th, 8th, etc.). These bonus feats must be drawn from the following list: Ambidexterity, Blind-Fight, Combat Reflexes, Dodge (Mobility, Spring Attack), Exotic Weapon Proficiency*, Expertise (Improved Disarm, Improved Trip, Whirlwind Attack), Improved Critical*, Improved Initiative, Improved Unarmed Strike (Deflect Arrows, Stunning Fist), Mounted Combat (Mounted Archery, Trample, Ride-By Attack, Spirited Charge), Point Blank Shot (Far Shot, Precise Shot, Rapid Shot, Shot on the Run), Power Attack (Cleave, Improved Bull

Rush, Sunder, Great Cleave), Quick Draw, Two- Weapon Fighting (Improved Two- Weapon Fighting), Weapon Finesse*, Weapon Focus*, Weapon Specialization*.

Some of the bonus feats available to a fighter cannot be acquired until the fighter has gained one or more prerequisite feats; these feats are listed parenthetically after the prerequisite feat. A fighter can select feats marked with an asterisk (*) more than once, but it must be for a different weapon each time. A fighter must still meet all prerequisites for a feat, including ability score and base attack bonus minimums.

Weapon Specialization: On achieving 4th level or higher, as a feat the fighter (and only the fighter) may take Weapon Specialization. Weapon Specialization adds a +2 damage bonus with a chosen weapon. The fighter must have Weapon Focus with that weapon to take Weapon Specialization. If the weapon is a ranged weapon, the damage bonus only applies if the target is within 30 feet, because only at that range can the fighter strike precisely enough to hit more effectively. The fighter may take this feat as a bonus feat or as a regular one.

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rules

monk

From d20 SDR (e3.0):

Monk

Alignment: Any lawful
Hit Die: d8

Class Skills: The monk’s class skills (and the key ability for each skill) are Balance (Dex), Climb (Str), Concentration (Con), Craft (Int), Diplomacy (Cha), Escape Artist (Dex), Hide (Dex), Jump (Str), Knowledge (arcana) (Int), Listen (Wis), Move Silently (Dex), Perform (Cha), Profession (Wis), Swim (Str), and Tumble (Dex).

Weapon and Armor Proficiency: Monks are proficient with basic peasant weapons and special weapons whose use is part of monk training. The full list includes club, crossbow (light or heavy), dagger, handaxe, javelin, kama, nunchaku, quarterstaff, shuriken, siangham, and sling.

A monk using a kama, nunchaku, or siangham can strike with his or her unarmed base attack, including her more favorable number of attacks per round (see below). His or her damage, however, is standard for the weapon (1d6, crit X2), not his or her unarmed damage. The weapon must be light, so a Small monk must use Tiny versions of these weapons in order to use the more favorable base attack.

A monk adds her Wisdom bonus (if any) to AC, in addition to her normal Dexterity modifier, and her AC improves as she gains levels. (Only add this extra AC bonus if the total of the monk’s Wisdom modifier and the number in the “AC Bonus” column is a positive number.) The Wisdom bonus and the AC bonus represent a preternatural awareness of danger, and a monk does not lose either even in situations when he or she loses her Dexterity modifier due to being unprepared, ambushed, stunned, and so on. (Monks do lose these AC bonuses when immobilized.)

When wearing armor, a monk loses her AC bonus for Wisdom, AC bonus for class and level, favorable multiple unarmed attacks per round, and heightened movement. Furthermore, her special abilities all face the arcane spell failure chance that the armor type normally imposes.

Table: Monk

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+2	+2	+2	Unarmed strike, stunning attack, evasion Deflect Arrows feat Still mind
2	+1	+3	+3	+3	
3	+2	+3	+3	+3	

4	+3	+4	+4	+4	Slow fall (20 ft.)
5	+3	+4	+4	+4	Purity of body
6	+4	+5	+5	+5	Slow fall (30 ft.), Improved Trip feat
7	+5	+5	+5	+5	Wholeness of body, leap of the clouds
8	+6/	+6	+6	+6	Slow fall (50 ft.)
9	+6/	+6	+6	+6	Improved evasion
10	+7/+2	+7	+7	+7	Ki strike (+1)
11	+8/+3	+7	+7	+7	Diamond body
12	+9/+4	+8	+8	+8	Abundant step
13	+9/+4	+8	+8	+8	Diamond soul, ki strike (+2)
14	+10/+5	+9	+9	+9	
15	+11/+6/	+9	+9	+9	Quivering palm
16	+12/+7/+2	+10	+10	+10	Ki strike (+3)
17	+12/+7/+2	+10	+10	+10	Timeless body, tongue of the sun and moon
18	+13/+8/+3	+11	+11	+11	Slow fall (any distance)
19	+14/+9/+4	+11	+11	+11	Empty body
20	+15/+10/+5	+12	+12	+12	Perfect self

Table: More Monk Abilities

Class Level	Unarmed Attack Bonus	Unarmed Damage*	AC Bonus	Unarmored Speed**
1	+0	1d6	+0	30 ft.
2	+1	1d6	+0	30 ft.
3	+2	1d6	+0	40 ft.
4	+3	1d8	+0	40 ft.
5	+3	1d8	+1	40 ft.
6	+4	1d8	+1	50 ft.
7	+5	1d8	+1	50 ft.
8	+6/	1d10	+1	50 ft.
9	+6/	1d10	+1	60 ft.
10	+7/+2	1d10	+2	60 ft.
11	+8/+3	1d10	+2	60 ft.
12	+9/+4	1d12	+2	70 ft.
13	+9/+4	1d12	+2	70 ft.
14	+10/+5	1d12	+2	70 ft.
15	+11/+6/	1d12	+3	80 ft.
16	+12/+7/+2	1d20	+3	80 ft.
17	+12/+7/+2	1d20	+3	80 ft.
18	+13/+8/+3	1d20	+3	90 ft.
19	+14/+9/+4	1d20	+3	90 ft.
20	+15/+10/+5	1d20	+4	90 ft.

* Small monks deal less damage.

** Small and dwarven monks are slower.

Table: Small Monk Unarmed Damage and Small Monk & Dwarf Monk Speed

Class Level	Unarmed Damage	Unarmored Speed
1-2	1d4	20 ft.
3	1d4	25 ft.
4-5	1d6	25 ft.
6-7	1d6	35 ft.
8	1d8	35 ft.
9-11	1d8	40 ft.
12-14	1d10	45 ft.
15	1d10	55 ft.

16-17	2d6	55 ft.
18-20	2d6	60 ft.

Unarmed Strike: A monk fighting unarmed gains the benefits of the Improved Unarmed Strike feat and thus does not provoke attacks of opportunity from armed opponents that she attacks.

Making an off-hand attack makes no sense for a monk striking unarmed.

A monk fighting with a one-handed weapon can make an unarmed strike as an off-hand attack, but she suffers the standard penalties for two-weapon fighting. Likewise, a monk with a weapon (other than a special monk weapon) in her off hand gets an extra attack with that weapon but suffers the usual penalties for two-weapon fighting and can't strike with a flurry of blows.

Flurry of Blows: The monk may make one extra attack in a round at her highest base attack, but this attack and each other attack made that round suffer a -2 penalty apiece. This penalty applies for 1 round, so it affects attacks of opportunity the monk might make before her next action. The monk must use the full attack action to strike with a flurry of blows. A monk may also use the flurry of blows if armed with a special monk weapon (kama, nunchaku, or siangham). If armed with one such weapon, the monk makes the extra attack either with that weapon or unarmed. If armed with two such weapons, she uses one for the regular attack (or attacks) and the other for the extra attack. In any case, her damage bonus on the attack with her off hand is not reduced.

Usually, a monk's unarmed strikes deal normal damage rather than subdual damage. However, she can choose to deal her damage as subdual damage when grappling.

Stunning Attack: The monk can use this ability once per round, but no more than once per level per day. The monk must declare she is using a stun attack before making the attack roll (thus, a missed attack roll ruins the attempt). A foe struck by the monk is forced to make a Fortitude saving throw (DC 10 + one-half the monk's level + Wisdom modifier). In addition to receiving normal damage, if the saving throw fails, the opponent is stunned for 1 round. The stunning attack is a supernatural ability.

Evasion: If a monk makes a successful Reflex saving throw against an attack that normally deals half damage on a successful save, the monk instead takes no damage. Evasion can only be used if the monk is wearing light armor or no armor. It is an extraordinary ability.

Deflect Arrows: At 2nd level, a monk gains the Deflect Arrows feat, even if she doesn't have the prerequisite Dexterity score.

Fast Movement: At 3rd level and higher, a monk moves faster than normal. A monk in armor (even light armor) or carrying a medium or heavy load loses this extra speed. A dwarf or a Small monk moves more slowly than a Medium-size monk.

From 9th level on, the monk's running ability is actually a supernatural ability.

Still Mind: At 3rd level, a monk gains a +2 bonus to saving throws against spells and

effects from the Enchantment school.

Slow Fall: At 4th level, the monk takes damage as if a fall were 20 feet shorter than it actually is. At 18th level, the monk can use a nearby wall to slow her descent and fall any distance without harm.

Purity of Body: At 5th level, a monk gains immunity to all diseases except for magical diseases.

Improved Trip: At 6th level, a monk gains the Improved Trip feat. She need not have taken the Expertise feat, normally a prerequisite.

Wholeness of Body: At 7th level, a monk can cure her own wounds. She can cure up to twice her current level in hit points each day, and she can spread this healing out among several uses. Wholeness of body is a supernatural ability.

Leap of the Clouds: At 7th level or higher, a monk's jumping distance (vertical or horizontal) is not limited according to her height.

Improved Evasion: At 9th level, a monk only takes half damage on a failed save.

Ki Strike: At 10th level, a monk's unarmed attack is empowered with ki. The unarmed strike damage from such an attack can deal damage to a creature with damage reduction as if the blow were made with a weapon with a +1 enhancement bonus. Ki strike is a supernatural ability.

Diamond Body: At 11th level, a monk gains immunity to poison of all kinds. Diamond body is a supernatural ability.

Abundant Step: At 12th level, a monk can slip magically between spaces, as per the spell dimension door, once per day. This is a spell-like ability, and the monk's effective casting level is one-half her actual level (rounded down).

Diamond Soul: At 13th level, a monk gains spell resistance. Her spell resistance equals her level + 10.

Quivering Palm: Starting at 15th level, a monk can use the quivering palm. The monk can use the quivering palm attack once a week, and she must announce her intent before making her attack roll. Creatures immune to critical hits cannot be affected. The monk must be of higher level than the target (or have more levels than the target's number of Hit Dice). If the monk strikes successfully and the target takes damage from the blow, the quivering palm attack succeeds. Thereafter the monk can choose to try to slay the victim at any later time within 1 day per level of the monk. The monk merely wills the target to die (a free action), and unless the target makes a Fortitude saving throw (DC 10 + one-half the monk's level + Wisdom modifier), it dies. If the saving throw is successful, the target is no longer in danger from that particular quivering palm attack (but may be affected by another one at a later time). Quivering palm is a supernatural ability.

Timeless Body: After achieving 17th level, a monk no longer suffers ability penalties

for aging and cannot be magically aged. (Any penalties she may have already suffered remain in place.) Bonuses still accrue, and the monk still dies of old age when her time is up.

Tongue of the Sun and Moon: A monk of 17th level or above can speak with any living creature.

Empty Body: At 19th level or higher, a monk can assume an ethereal state for 1 round per level per day, as per the spell etherealness. The monk may go ethereal on a number of different occasions during any single day as long as the total number of rounds spent ethereal does not exceed her level. Empty body is a supernatural ability.

Perfect Self: At 20th level, a monk is forevermore treated as an outsider rather than as a humanoid. Additionally, the monk gains damage reduction 20/+1.

Ex-Monks: A monk who becomes nonlawful cannot gain new levels as a monk but retain all monk abilities.

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paladin

From d20 SDR (e3.0):

Paladin

Alignment: Lawful good

Hit Die: d10

Class Skills: The paladin's class skills (and the key ability for each skill) are Concentration (Con), Craft (Int), Diplomacy (Cha), Handle Animal (Cha), Heal (Wis), Knowledge (religion) (Int), Profession (Wis), and Ride (Dex).

Weapon and Armor Proficiency: Paladins are proficient with all simple and martial weapons, with all types of armor (heavy, medium, and light), and with shields.

Table: Paladin

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+2	+0	+0	Detect evil, divine grace, lay on hands, divine health Aura of courage, smite evil Remove disease, turn undead
2	+2	+3	+0	+0	
3	+3	+3	+1	+1	
4	+4	+4	+1	+1	
5	+5	+4	+1	+1	Special mount Remove disease 2/week
6	+6/+1	+5	+2	+2	
7	+7/+2	+5	+2	+2	Remove disease 3/week
8	+8/+3	+6	+2	+2	
9	+9/+4	+6	+3	+3	
10	+10/+5	+7	+3	+3	Remove disease 4/week
11	+11/+6/+1	+7	+3	+3	
12	+12/+7/+2	+8	+4	+4	
13	+13/+8/+3	+8	+4	+4	
14	+14/+9/+4	+9	+4	+4	Remove disease 5/week
15	+15/+10/+5	+9	+5	+5	
16	+16/+11/+6/+1	+10	+5	+5	
17	+17/+12/+7/+2	+10	+5	+5	Remove disease 6/week
18	+18/+13/+8/+3	+11	+6	+6	
19	+19/+14/+9/+4	+11	+6	+6	
20	+20/+15/+10/+5	+12	+6	+6	

Table: Paladin Spells Per Day

Level	1st	2nd	3rd	4th
1	—	—	—	—
2	—	—	—	—
3	—	—	—	—
4	—	—	—	—
5	0	—	—	—
6	0	—	—	—
7	1	—	—	—

8	1	0	—	—
9	1	0	—	—
10	1	1	—	—
11	1	1	0	—
12	1	1	1	—
13	1	1	1	—
14	2	1	1	0
15	2	1	1	1
16	2	2	1	1
17	2	2	2	1
18	3	2	2	1
19	3	3	3	2
20	3	3	3	3

Detect Evil: At will, the paladin can detect evil as a spell-like ability. This ability duplicates the effects of the spell detect evil.

Divine Grace: A paladin applies her Charisma modifier (if positive) as a bonus to all saving throws.

Lay on Hands: Each day a paladin can cure a total number of hit points equal to the paladin's Charisma bonus (if any) times the paladin's level. The paladin can cure themselves. The paladin may choose to divide her curing among multiple recipients, and he or she doesn't have to use it all at once. Lay on hands is a spell-like ability whose use is a standard action.

Alternatively, the paladin can use any or all of these points to deal damage to undead creatures. Treat this attack just like a touch spell. The paladin decides how many cure points to use as damage after successfully touching the undead creature.

Divine Health: A paladin is immune to all diseases, including magical diseases.

Aura of Courage: Beginning at 2nd level, a paladin is immune to fear (magical or otherwise). Allies within 10 feet of the paladin gain a +4 morale bonus on saving throws against fear effects. Granting the morale bonus to allies is a supernatural ability.

Smite Evil: Once per day, a paladin of 2nd level or higher may attempt to smite evil with one normal melee attack. She adds her Charisma modifier (if positive) to the paladin's attack roll and deals 1 extra point of damage per level. If the paladin accidentally smites a creature that is not evil, the smite has no effect but it is still used up for that day. Smite evil is a supernatural ability.

Remove Disease: Beginning at 3rd level, a paladin can remove disease, as per the spell remove disease, once per week. Remove disease is a spell-like ability for paladins.

Turn Undead: The paladin may use this ability a number of times per day equal to three plus the paladin's Charisma modifier. The paladin turns undead as a cleric of two levels lower would.

Extra Turning: As a feat, a paladin may take Extra Turning. This feat allows the paladin to turn undead four more times per day than normal. A paladin can take this feat multiple times, gaining four extra daily turning attempts each time.

Spells: Beginning at 4th level, a paladin gains the ability to cast a small number of divine spells. To cast a spell, the paladin must have a Wisdom score of at least 10 + the spell's level. Paladin bonus spells are based on Wisdom, and saving throws against these spells have a Difficulty Class of 10 + spell level + Wisdom modifier. When the paladin gets 0 spells of a given level, such as 0 1st-level spells at 4th level, the paladin gets only bonus spells. A paladin has access to any spell on the paladin spell list and can freely choose which to prepare, just as a cleric can.

A paladin prepares and casts spells just as a cleric does (though the paladin cannot use spontaneous casting to substitute a cure spell in place of a prepared spell).

Through 3rd level, a paladin has no caster level. Starting at 4th level, a paladin's caster level is one-half his or her class level.

Special Mount: Upon or after reaching 5th level, a paladin can call an unusually intelligent, strong, and loyal steed to serve him or her in her crusade against evil. This mount is usually a heavy warhorse (for a Medium-size paladin) or a warpony (for a Small paladin).

Should the paladin's mount die, another cannot be called for a year and a day. The new mount has all the accumulated abilities due a mount of the paladin's level.

The DM will provide information about the mount that responds to the paladin's call.

Code of Conduct: A paladin must be of lawful good alignment and loses all special class abilities if she ever willingly commits an act of evil. Additionally, a paladin's code requires that she respect legitimate authority, act with honor (not lying, not cheating, not using poison, etc.), help those who need help (provided they do not use the help for evil or chaotic ends), and punish those that harm or threaten innocents.

Associates: While she may adventure with characters of any good or neutral alignment, a paladin will never knowingly associate with evil characters. A paladin will not continue an association with someone who consistently offends her moral code. A paladin may only hire henchmen or accept followers who are lawful good.

Ex-Paladins: A paladin who ceases to be lawful good, who willfully commits an evil act, or who grossly violates the code of conduct loses all special abilities and spells, including the service of the paladin's warhorse. She also may not progress in levels as a paladin. She regains her abilities if she atones for her violations, as appropriate.

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ranger

From d20 SDR (e3.0):

Ranger

Alignment: Any

Hit Die: d10

Class Skills: The ranger’s class skills (and the key ability for each skill) are Animal Empathy (Cha, exclusive skill), Climb (Str), Concentration (Con), Craft (Int), Handle Animal (Cha), Heal (Wis), Hide (Dex), Intuit Direction (Wis), Jump (Str), Knowledge (nature) (Int), Listen (Wis), Move Silently (Dex), Profession (Wis), Ride (Dex), Search (Int), Spot (Wis), Swim (Str), Use Rope (Dex), and Wilderness Lore (Wis).

Weapon and Armor Proficiency: A ranger is proficient with all simple and martial weapons, light armor, medium armor, and shields.

When wearing light armor or no armor, a ranger can fight with two weapons as if he or she had the feats Ambidexterity and Two-Weapon Fighting. The ranger loses this special bonus when fighting in medium or heavy armor, or when using a double-headed weapon (such as a double sword).

Table: Ranger

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+2	+0	+0	Track, 1st favored enemy
2	+2	+3	+0	+0	
3	+3	+3	+1	+1	
4	+4	+4	+1	+1	
5	+5	+4	+1	+1	
6	+6/+1	+5	+2	+2	2nd favored enemy
7	+7/+2	+5	+2	+2	
8	+8/+3	+6	+2	+2	
9	+9/+4	+6	+3	+3	
10	+10/+5	+7	+3	+3	
11	+11/+6/+1	+7	+3	+3	3rd favored enemy
12	+12/+7/+2	+8	+4	+4	
13	+13/+8/+3	+8	+4	+4	
14	+14/+9/+4	+9	+4	+4	
15	+15/+10/+5	+9	+5	+5	
16	+16/+11/+6/+1	+10	+5	+5	4th favored enemy
17	+17/+12/+7/+2	+10	+5	+5	
18	+18/+13/+8/+3	+11	+6	+6	
19	+19/+14/+9/+4	+11	+6	+6	
20	+20/+15/+10/+5	+12	+6	+6	
					5th favored enemy

Table: Ranger Spells Per Day

Level	1st	2nd	3rd	4th
1	—	—	—	—
2	—	—	—	—
3	—	—	—	—
4	—	—	—	—
5	0	—	—	—
6	0	—	—	—
7	1	—	—	—
8	1	0	—	—
9	1	0	—	—
10	1	1	—	—
11	1	1	0	—
12	1	1	1	—
13	1	1	1	—
14	2	1	1	0
15	2	1	1	1
16	2	2	1	1
17	2	2	2	1
18	3	2	2	1
19	3	3	3	2
20	3	3	3	3

Spells: Beginning at 4th level, a ranger gains the ability to cast a small number of divine spells. To cast a spell, the ranger must have a Wisdom score of at least 10 + the spell's level. Ranger bonus spells are based on Wisdom, and saving throws against these spells have a Difficulty Class of 10 + spell level + Wisdom modifier. When the ranger gets 0 spells of a given level, such as 0 1st-level spells at 4th level, the ranger gets only bonus spells. A ranger without a bonus spell for that level cannot yet cast a spell of that level. A ranger has access to any spell on the ranger spell list and can freely choose which to prepare. A ranger prepares and casts spells just as a cleric does (though the ranger cannot use spontaneous casting to lose a spell and cast a cure or inflict spell in its place).

Through 3rd level, a ranger has no caster level. Starting at 4th level, a ranger's caster level is one-half his class level.

Track: A ranger gains Track as a bonus feat.

Favored Enemy: At 1st level, a ranger may select a type of creature as a favored enemy. (A ranger can only select his own race as a favored enemy if he is evil.) Due to his extensive study of his foes and training in the proper techniques for combating them, the ranger gains a +1 bonus to Bluff, Listen, Sense Motive, Spot, and Wilderness Lore checks when using these skills against this type of creature. Likewise, he gets the same bonus to weapon damage rolls against creatures of this type. A ranger also gets the damage bonus with ranged weapons, but only against targets within 30 feet (the ranger cannot strike with deadly accuracy beyond that range). The bonus doesn't apply to damage against creatures that are immune to critical hits.

At 5th level and at every five levels thereafter (10th, 15th, and 20th level), the ranger may select a new favored enemy, and the bonus associated with every previously selected favored enemy goes up by +1.

Table: Ranger Favored Enemies

Type:		
Aberrations	Animals	Beasts
Constructs	Dragons	Elementals
Fey	Giants	Humanoid type*
Magical beasts	Oozes	Outsider type*
Plants	Shapechangers	Undead
Vermin		

* Rangers may not select “humanoid” or “outsider” as a favored enemy, but they may select a more narrowly defined type of humanoid or outsider. A ranger can only select his own race as a favored enemy if he is evil.

Improved Two-Weapon Fighting: A ranger with a base attack bonus of at least +9 can choose to gain the Improved Two-Weapon Fighting feat even if he does not have the other prerequisites for the feat. The ranger must be wearing light armor or no armor in order to use this benefit.

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rogue

From d20 SDR (e3.0):

Rogue

Alignment: Any
Hit Die: d6

Class Skills: The rogue’s class skills (and the key ability for each skill) are Appraise (Int), Balance (Dex), Bluff (Cha), Climb (Str), Craft (Int), Decipher Script (Int, exclusive skill), Diplomacy (Cha), Disable Device (Int), Disguise (Cha), Escape Artist (Dex), Forgery (Int), Gather Information (Cha), Hide (Dex), Innuendo (Wis), Intimidate (Cha), Intuit Direction (Wis), Jump (Str), Listen (Wis), Move Silently (Dex), Open Lock (Dex), Perform (Cha), Pick Pocket (Dex), Profession (Wis), Read Lips (Int, exclusive skill), Search (Int), Sense Motive (Wis), Spot (Wis), Swim (Str), Tumble (Dex), Use Magic Device (Cha, exclusive skill), and Use Rope (Dex).

Weapon and Armor Proficiency: A rogue’s weapon training focuses on weapons suitable for stealth and sneak attacks. Thus, all rogues are proficient with the crossbow (hand or light), dagger (any type), dart, light mace, sap, shortbow (normal and composite), and short sword. Medium-size rogues are also proficient with certain weapons that are too big for Small rogues to use and conceal easily: club, heavy crossbow, heavy mace, morningstar, quarterstaff, and rapier. Rogues are proficient with light armor but not with shields.

Table: Rogue

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+2	+0	Sneak attack +1d6
2	+1	+0	+3	+0	Evasion
3	+2	+1	+3	+1	Uncanny dodge (Dex bonus to AC), sneak attack +2d6
4	+3	+1	+4	+1	
5	+3	+1	+4	+1	Sneak attack +3d6
6	+4	+2	+5	+2	Uncanny dodge (can't be flanked)
7	+5	+2	+5	+2	Sneak attack +4d6
8	+6/+1	+2	+6	+2	
9	+6/+1	+3	+6	+3	Sneak attack +5d6
10	+7/+2	+3	+7	+3	Special ability
11	+8/+3	+3	+7	+3	Uncanny dodge (+1 against traps), sneak attack +6d6
12	+9/+4	+4	+8	+4	
13	+9/+4	+4	+8	+4	Sneak attack +7d6, special ability
14	+10/+5	+4	+9	+4	Uncanny dodge (+2 against traps)
15	+11/+6/+1	+5	+9	+5	Sneak attack +8d6
16	+12/+7/+2	+5	+10	+5	Special ability
17	+12/+7/+2	+5	+10	+5	Uncanny dodge (+3 against traps), sneak attack +9d6

18	+13/+8/+3	+6	+11	+6	Sneak attack +10d6, special ability Uncanny dodge (+4 against traps)
19	+14/+9/+4	+6	+11	+6	
20	+15/+10/+5	+6	+12	+6	

Sneak Attack: Any time the rogue's target would be denied a Dexterity bonus to AC (whether the target actually has a Dexterity bonus or not), or when the rogue flanks the target, the rogue's attack deals extra damage. The extra damage is +1d6 at 1st level and an additional 1d6 every two levels thereafter. Should the rogue score a critical hit with a sneak attack, this extra damage is not multiplied.

Ranged attacks can only count as sneak attacks if the target is within 30 feet. The rogue can't strike with deadly accuracy from beyond that range.

With a sap (blackjack) or an unarmed strike, the rogue can make a sneak attack that deals subdual damage instead of normal damage. The rogue cannot use a weapon that deals normal damage to deal subdual damage in a sneak attack, not even with the usual -4 penalty.

A rogue can only sneak attack a living creature with a discernible anatomy. Any creature that is immune to critical hits is also not vulnerable to sneak attacks. The rogue must be able to see the target well enough to pick out a vital spot and must be able to reach a vital spot. The rogue cannot sneak attack while striking a creature with concealment or striking the limbs of a creature whose vitals are beyond reach.

Traps: Rogues (and only rogues) can use the Search skill to locate traps when the task has a Difficulty Class higher than 20. Finding a nonmagical trap has a DC of at least 20, higher if it is well hidden. Finding a magic trap has a DC of 25 + the level of the spell used to create it.

Rogues (and only rogues) can use the Disable Device skill to disarm magic traps. A magic trap generally has a DC of 25 + the level of the spell used to create it.

A rogue who beats a trap's DC by 10 or more with a Disable Device check can generally study a trap, figure out how it works, and bypass it (with his party) without disarming it.

Evasion: At 2nd level, a rogue gains evasion. If exposed to any effect that normally allows a character to attempt a Reflex saving throw for half damage, the rogue takes no damage with a successful saving throw. Evasion can only be used if the rogue is wearing light armor or no armor. It is an extraordinary ability.

Uncanny Dodge: At 3rd level and above, she retains her Dexterity bonus to AC (if any) if caught flat-footed or struck by an invisible attacker.

At 6th level, the rogue can no longer be flanked. Another rogue at least four levels higher can still flank.

At 11th level, the rogue gains a +1 bonus to Reflex saves made to avoid traps and a +1 dodge bonus to AC against attacks by traps. At 14th level, these bonuses rise to +2. At 17th, they rise to +3, and at 20th they rise to +4.

Special Abilities: On achieving 10th level and every three levels thereafter (13th, 16th, and 19th), a rogue chooses a special ability from among the following:

- Crippling Strike: When the rogue damages an opponent with a sneak attack, the target also takes 1 point of Strength damage.
- Defensive Roll: Once per day, when a rogue would be reduced to 0 hit points or less by damage in combat (from a weapon or other blow, not a spell or special ability), the rogue can attempt to roll with the damage. She makes a Reflex saving throw (DC = damage dealt) and, if successful, takes only half damage from the blow. The rogue must be aware of the attack and able to react to it in order to execute the defensive roll - if the Dexterity bonus to AC is denied, the rogue can't roll. Since this effect would not normally allow a character to make a Reflex save for half damage, the rogue's evasion ability does not apply to the defensive roll.
- Improved Evasion: The rogue takes only half damage on a failed save.
- Opportunist: Once per round, the rogue can make an attack of opportunity against an opponent who has just been struck for damage in melee by another character. This attack counts as the rogue's attacks of opportunity for that round. Even a rogue with the Combat Reflexes feat can't use the opportunist ability more than once per round.
- Skill Mastery: The rogue selects a number of skills equal to 3 + Intelligence modifier. When making a skill check with one of these skills, the rogue may take 10 even if stress and distractions would normally prevent the rogue from doing so. The rogue may gain this special ability multiple times, selecting additional skills for it to apply to each time.
- Slippery Mind: If a rogue with a slippery mind is affected by an enchantment and fails the saving throw, 1 round later the rogue can attempt the saving throw again. The rogue only gets this one extra chance to succeed. This is an extraordinary ability.
- Feat: A rogue may gain a feat in place of a special ability.

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rules

sorcerer

From d20 SDR (e3.0):

Sorcerer

Alignment: Any
Hit Die: d4

Class Skills: The sorcerer’s class skills (and the key ability for each skill) are Alchemy (Int), Concentration (Con), Craft (Int), Knowledge (arcana) (Int), Profession (Wis), Scry (Int, exclusive skill), and Spellcraft (Int).

Weapon and Armor Proficiency: Sorcerers are proficient with all simple weapons. They are not proficient with any type of armor, nor with shields.

Table: Sorcerer

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+0	+2	Summon familiar
2	+1	+0	+0	+3	
3	+1	+1	+1	+3	
4	+2	+1	+1	+4	
5	+2	+1	+1	+4	
6	+3	+2	+2	+5	
7	+3	+2	+2	+5	
8	+4	+2	+2	+6	
9	+4	+3	+3	+6	
10	+5	+3	+3	+7	
11	+5	+3	+3	+7	
12	+6/+1	+4	+4	+8	
13	+6/+1	+4	+4	+8	
14	+7/+2	+4	+4	+9	
15	+7/+2	+5	+5	+9	
16	+8/+3	+5	+5	+10	
17	+8/+3	+5	+5	+10	
18	+9/+4	+6	+6	+11	
19	+9/+4	+6	+6	+11	
20	+10/+5	+6	+6	+12	

Table: Sorcerer Spells Per Day

Level	0	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	5	3	—	—	—	—	—	—	—	—
2	6	4	—	—	—	—	—	—	—	—
3	6	5	—	—	—	—	—	—	—	—
4	6	6	3	—	—	—	—	—	—	—
5	6	6	4	—	—	—	—	—	—	—
6	6	6	5	3	—	—	—	—	—	—

7	6	6	6	4	—	—	—	—	—	—
8	6	6	6	5	3	—	—	—	—	—
9	6	6	6	6	4	—	—	—	—	—
10	6	6	6	6	5	3	—	—	—	—
11	6	6	6	6	6	4	—	—	—	—
12	6	6	6	6	6	5	3	—	—	—
13	6	6	6	6	6	6	4	—	—	—
14	6	6	6	6	6	6	5	3	—	—
15	6	6	6	6	6	6	6	4	—	—
16	6	6	6	6	6	6	6	5	3	—
17	6	6	6	6	6	6	6	6	4	—
18	6	6	6	6	6	6	6	6	5	3
19	6	6	6	6	6	6	6	6	6	4
20	6	6	6	6	6	6	6	6	6	6

Table: Sorcerer Spells Known

Level	0	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	4	2	—	—	—	—	—	—	—	—
2	5	2	—	—	—	—	—	—	—	—
3	5	3	—	—	—	—	—	—	—	—
4	6	3	1	—	—	—	—	—	—	—
5	6	4	2	—	—	—	—	—	—	—
6	7	4	2	1	—	—	—	—	—	—
7	7	5	3	2	—	—	—	—	—	—
8	8	5	3	2	1	—	—	—	—	—
9	8	5	4	3	2	—	—	—	—	—
10	9	5	4	3	2	1	—	—	—	—
11	9	5	5	4	3	2	—	—	—	—
12	9	5	5	4	3	2	1	—	—	—
13	9	5	5	4	4	3	2	—	—	—
14	9	5	5	4	4	3	2	1	—	—
15	9	5	5	4	4	4	3	2	—	—
16	9	5	5	4	4	4	3	2	1	—
17	9	5	5	4	4	4	3	3	2	—
18	9	5	5	4	4	4	3	3	2	1
19	9	5	5	4	4	4	3	3	3	2
20	9	5	5	4	4	4	3	3	3	3

Spells: A sorcerer casts arcane spells. The number of spells a sorcerer knows is not affected by his Charisma bonus. The spells a sorcerer knows can be common spells chosen from the sorcerer and wizard spell list, or they can be unusual spells that the sorcerer has gained some understanding of by study.

A sorcerer is limited to casting a certain number of spells of each level per day, but he need not prepare his spells in advance. The number of spells he can cast per day is improved by his bonus spells, if any.

A sorcerer may use a higher-level slot to cast a lower-level spell if he so chooses. The spell is still treated as its actual level, not the level of the slot used to cast it.

To learn or cast a spell, a sorcerer must have a Charisma score of at least 10 + the spell's level. The Difficulty Class for saving throws against sorcerer spells is 10 + the spell's level + the sorcerer's Charisma modifier.

Familiar: A sorcerer can call a familiar. Doing so takes a day and uses up magical

materials that cost 100 gp. A familiar is a magical, unusually tough, and intelligent version of a small animal. It is a magical beast, not an animal. The creature serves as a companion and servant.

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rules

wizard

From d20 SDR (e3.0):

Wizard

Alignment: Any
Hit Die: d4

Class Skills: The wizard’s class skills (and the key ability for each skill) are Alchemy (Int), Concentration (Con), Craft (Int), Knowledge (all skills, taken individually) (Int), Profession (Wis), Scry (Int, exclusive skill), and Spellcraft (Int).

Weapon and Armor Proficiency: Wizards are skilled with the club, dagger, heavy crossbow, light crossbow, and quarterstaff. Wizards are not proficient with any type of armor nor with shields.

Table: Wizard

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+0	+2	Summon familiar, scribe scroll
2	+1	+0	+0	+3	
3	+1	+1	+1	+3	
4	+2	+1	+1	+4	
5	+2	+1	+1	+4	Bonus feat
6	+3	+2	+2	+5	
7	+3	+2	+2	+5	
8	+4	+2	+2	+6	
9	+4	+3	+3	+6	Bonus feat
10	+5	+3	+3	+7	
11	+5	+3	+3	+7	
12	+6/+1	+4	+4	+8	
13	+6/+1	+4	+4	+8	Bonus feat
14	+7/+2	+4	+4	+9	
15	+7/+2	+5	+5	+9	
16	+8/+3	+5	+5	+10	
17	+8/+3	+5	+5	+10	Bonus feat
18	+9/+4	+6	+6	+11	
19	+9/+4	+6	+6	+11	
20	+10/+5	+6	+6	+12	

Table: Wizard Spells Per Day

Level	0	1st	2nd	3rd	4th	5th	6th	7th	8th	9th
1	3	1	—	—	—	—	—	—	—	—
2	4	2	—	—	—	—	—	—	—	—
3	4	2	1	—	—	—	—	—	—	—
4	4	3	2	—	—	—	—	—	—	—

5	4	3	2	1	—	—	—	—	—	—	—
6	4	3	3	2	—	—	—	—	—	—	—
7	4	4	3	2	1	—	—	—	—	—	—
8	4	4	3	3	2	—	—	—	—	—	—
9	4	4	4	3	2	1	—	—	—	—	—
10	4	4	4	3	3	2	—	—	—	—	—
11	4	4	4	4	3	2	1	—	—	—	—
12	4	4	4	4	3	3	2	—	—	—	—
13	4	4	4	4	4	3	2	1	—	—	—
14	4	4	4	4	4	3	3	2	—	—	—
15	4	4	4	4	4	4	3	2	1	—	—
16	4	4	4	4	4	4	3	3	2	—	—
17	4	4	4	4	4	4	4	3	2	1	—
18	4	4	4	4	4	4	4	3	3	2	—
19	4	4	4	4	4	4	4	4	3	3	2
20	4	4	4	4	4	4	4	4	4	3	3

Spells: A wizard casts arcane spells. She is limited to a certain number of spells of each spell level per day, according to her class level. A wizard must prepare spells ahead of time by getting a good night's sleep and spending 1 hour studying her spellbook. While studying, the wizard decides which spells to prepare. To learn, prepare, or cast a spell, a wizard must have an Intelligence score of at least 10 + the spell's level. A wizard's bonus spells are based on Intelligence. The Difficulty Class for saving throws against wizard spells is 10 + the spell's level + the wizard's Intelligence modifier.

Bonus Languages: A wizard may substitute Draconic for one of the bonus languages available to the character.

Familiar: A wizard can call a familiar. Doing so takes a day and uses up magical materials that cost 100 gp. A familiar is a magical, unusually tough, and intelligent version of a small animal. It is a magical beast, not an animal. The creature serves as a companion and servant.

Scribe Scroll: A wizard has the bonus item creation feat Scribe Scroll, enabling her to create magic scrolls.

Bonus Feats: Every five levels, a wizard gains a bonus feat. This feat must be a metamagic feat, an item creation feat, or Spell Mastery.

Spellbooks: Wizards must study their spellbooks each day to prepare their spells. A wizard cannot prepare any spell not recorded in her spellbook (except for read magic, which all wizards can prepare from memory).

Spell Mastery: A wizard (and only a wizard) can take the special feat Spell Mastery. Each time the wizard takes this feat, choose a number of spells equal to the wizard's Intelligence modifier (they must be spells that the wizard already knows). From that point on, the wizard can prepare these spells without referring to a spellbook.

School Specialization

A school is one of eight groupings of spells, each defined by a common theme, such as illusion or necromancy. A wizard may specialize in one school of magic.

Specialization allows a wizard to cast extra spells from the chosen school, but the wizard then never learns to cast spells from one or more other schools. Spells of the school or schools that the specialist gives up are not available to her, and she can't even cast such spells from scrolls or wands.

The wizard must choose whether to specialize and how at 1st level. She may not change her specialization later.

The specialist can prepare one additional spell (of the school selected as a specialty) per spell level each day.

The specialist gains a +2 bonus to Spellcraft checks to learn the spells of her chosen school.

The eight schools of arcane magic are *Abjuration*, *Conjuration*, *Divination*, *Enchantment*, *Evocation*, *Illusion*, *Necromancy*, and *Transmutation*. Spells that do not fall into any of these schools are called *Universal* spells.

- Abjuration: To become an abjurer, a wizard must select a prohibited school or schools from the following choices: (1) either Conjuration, Enchantment, Evocation, Illusion, or Transmutation; or (2) both Divination and Necromancy.
- Conjuration: To become a conjurer, a wizard must select a prohibited school or schools from one of the following choices: (1) Evocation; (2) any two of the following three schools: Abjuration, Enchantment, and Illusion; (3) Transmutation, or (4) any three schools.
- Divination: To become a diviner, a wizard must select any other single school as a prohibited school.
- Enchantment: To become an enchanter, a wizard must select a prohibited school or schools from the following choices: (1) either Abjuration, Conjuration, Evocation, Illusion, or Transmutation; or (2) both Divination and Necromancy.
- Evocation: To become an evoker, a wizard must select a prohibited school or schools from one of the following choices: (1) Conjuration; (2) any two of the following three schools: Abjuration, Enchantment, and Illusion; (3) Transmutation; or (4) any three schools.
- Illusion: To become an illusionist, a wizard must select a prohibited school or schools from the following choices: (1) either Abjuration, Conjuration, Enchantment, Evocation, or Transmutation; or (2) both Divination and Necromancy.
- Necromancy: To become a necromancer, a wizard must select any other single school as a prohibited school.
- Transmutation: To become a transmuter, a wizard must select a prohibited school or schools from one of the following choices: (1) Conjuration; (2) Evocation; (2) any two of the following three schools: Abjuration, Enchantment, and Illusion; or (4) any three schools.
- Universal: Not a school, but a category for spells all wizards can learn. A wizard cannot select universal as a specialty school or as a school to which she does not have access.

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rules

prestige classes

From d20 SDR (e3.0):

Prestige Classes

The Prestige Character Classes generally have the following attributes:

Alignment

A few classes restrict a character's possible alignments. An entry of "Any" means that characters of this class are not restricted in alignment.

Hit Die

The type of Hit Die used by characters of the class determines the number of hit points gained per level.

Requirements

The character must meet these requirements prior to adding this class.

Class Table

This table details how a character improves as he or she gains experience levels. Class tables typically include the following:

- **Level:** The character's level in that class.
- **Base Attack Bonus:** The character's base attack bonus and number of attacks.
- **Fort Save:** The base save bonus on Fortitude saving throws. The character's Constitution modifier also applies.
- **Ref Save:** The base save bonus on Reflex saving throws. The character's Dexterity modifier also applies.
- **Will Save:** The base save bonus on Will saving throws. The character's Wisdom modifier also applies.
- **Special:** Level-dependent class abilities, each explained in the "Class Features" sections that follow.

Class Skills

The number of skill points the character starts with at 1st level, the number of skill points gained each level thereafter, and the list of class skills.

Class Features

Special characteristics of the class. When applicable, this section also mentions restrictions and disadvantages of the class. Class features include some or all of the following:

- **Weapon and Armor Proficiency:** Which weapons and armor types the character is proficient with.
- **Other Features:** Each class has certain unique capabilities.
- **Ex-Members:** If, for some reason, a character is forced to give up this class, these are the rules for what happens.
- **Spells per Day:** How many spells of each spell level the character can cast each day. If the entry is “—” for a given level of spells, the character may not cast any spells of that level. If the entry is “0,” the character may only cast spells of that level if he or she has bonus spells. If the entry is a number, the character may cast that many spells plus any bonus spells. Bonus spells for wizards are based on Intelligence. Bonus spells for clerics, druids, paladins, and rangers are based on Wisdom. Bonus spells for sorcerers and bards are based on Charisma. A character can always choose to memorize a lower-level spell to fill a higher-level slot.

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rules

arcane archer

From d20 SDR (e3.0):

Arcane Archer

Alignment: Any
Hit Die: d8

Requirements:

- **Race:** Elf or half-elf.
- **Base Attack Bonus:** +6.
- **Feats:** Weapon Focus (any bow other than a crossbow), Point Blank Shot, Precise Shot.
- **Spellcasting:** Ability to cast 1st-level arcane spells.

Class Skills: The arcane archer’s class skills (and the key ability for each skill) are Craft (Int), Hide (Dex), Intuit Direction (Wis), Listen (Wis), Move Silently (Dex), Ride (Dex), Spot (Wis), Use Rope (Dex), and Wilderness Lore (Wis).

Weapon and Armor Proficiency: An arcane archer is proficient with all simple and martial weapons, light armor, medium armor, and shields.

Table: Arcane Archer

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+2	+2	+0	Enchant Arrow +1
2	+2	+3	+3	+0	Imbue Arrow
3	+3	+3	+3	+1	Enchant Arrow +2
4	+4	+4	+4	+1	Seeker Arrow
5	+5	+4	+4	+1	Enchant Arrow +3
6	+6	+5	+4	+2	Phase Arrow
7	+7	+5	+5	+2	Enchant Arrow +4
8	+8	+6	+6	+2	Hail of Arrows
9	+9	+6	+6	+3	Enchant Arrow +5
10	+10	+7	+7	+3	Arrow of Death

Enchant Arrow: At 1st level, every nonmagical arrow an arcane archer nocks and lets fly becomes enchanted, gaining a +1 enhancement bonus. An archer’s magic arrows only function for her. For every two levels of arcane archer the character advances past 1st level in the prestige class, the magic arrows she creates gain +1 greater potency.

Imbue Arrow: At 2nd level, an arcane archer gains this spell-like ability, allowing her to place an area spell upon an arrow. When the arrow is fired, the spell’s area is centered

upon where the arrow lands, even if the spell could normally be centered only on the caster. This ability allows the archer to use the bow's range rather than the spell's range. It takes a standard action to cast the spell and fire the arrow. The arrow must be fired in the round the spell is cast, or the spell is wasted.

Seeker Arrow: At 4th level, the arcane archer can launch an arrow once per day at a target known to her within range, and the arrow travels to the target, even around corners. Only an unavoidable obstacle or the end of the arrow's range prevents the arrow's flight. This ability negates cover and concealment modifiers, but otherwise the attack is rolled normally. This is a spell-like ability. (Shooting the arrow is part of the action.)

Phase Arrow: At 6th level, the arcane archer can launch an arrow once per day at a target known to her within range, and the arrow travels to the target in a straight path, passing through any nonmagical barrier or wall in its way. (A wall of force, a wall of fire, or the like stops the arrow.) This ability negates cover, concealment, and even armor modifiers, but otherwise the attack is rolled normally. This is a spell-like ability. (Shooting the arrow is part of the action.)

Hail of Arrows: In lieu of her regular attacks, once per day the 8th-level arcane archer can fire an arrow at each and every target within range, to a maximum of one target for every arcane archer level she has earned. Each attack uses the archer's primary attack bonus, and each enemy may only be targeted by a single arrow. This is a spell-like ability.

Arrow of Death: At 10th level, the arcane archer can enchant an arrow of death that forces the target, if damaged by the arrow's attack, to make a Fortitude save (DC 20) or be slain immediately. It takes one day to create an arrow of death, and the arrow only functions for the arcane archer who created it. The enchantment lasts no longer than one year, and the archer can only have one such arrow in existence at a time.

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rules

assassin

From d20 SDR (e3.0):

Assassin

Alignment: Any evil
Hit Die: d6

Requirements:

- **Move Silently:** 8 ranks.
- **Hide:** 8 ranks.
- **Disguise:** 4 ranks.
- **Special:** In addition, he must kill someone for no other reason than to join the assassins.

Class Skills: The assassin’s class skills (and the key ability for each skill) are Balance (Dex), Bluff (Cha), Climb (Str), Craft (Int), Decipher Script (Int, exclusive skill), Diplomacy (Cha), Disable Device (Int), Disguise (Cha), Escape Artist (Dex), Forgery (Int), Gather Information (Cha), Hide (Dex), Innuendo (Wis), Intimidate (Cha), Intuit Direction (Wis), Jump (Str), Listen (Wis), Move Silently (Dex), Open Lock (Dex), Pick Pocket (Dex), Read Lips (Int, exclusive skill), Search (Int), Sense Motive (Wis), Spot (Wis), Swim (Str), Tumble (Dex), Use Magic Device (Cha, exclusive skill), and Use Rope (Dex).

Weapon and Armor Proficiency: Assassins are proficient with the crossbow (hand, light, or heavy), dagger (any type), dart, rapier, sap, shortbow (normal and composite), and short sword. Assassins are proficient with light armor but not with shields.

Table: Assassin

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+2	+0	Sneak attack +1d6, death attack, poison use
2	+1	+0	+3	+0	+1 save vs. poison, uncanny dodge (Dex bonus to AC)
3	+2	+1	+3	+1	Sneak attack +2d6
4	+3	+1	+4	+1	+2 save vs. poison
5	+3	+1	+4	+1	Sneak attack +3d6, uncanny dodge (can't be flanked)
6	+4	+2	+4	+2	+3 save vs. poison
7	+5	+2	+5	+2	Sneak attack +4d6
8	+6	+2	+6	+2	+4 save vs. poison
9	+6	+3	+6	+3	Sneak attack +5d6
10	+7	+3	+7	+3	+5 save vs. poison, uncanny dodge (+1 vs. traps)

Table: Assassin Spells Per Day

Level	1st	2nd	3rd	4th

1	0	—	—	—
2	1	—	—	—
3	1	0	—	—
4	1	1	—	—
5	1	1	0	—
6	1	1	1	—
7	2	1	1	0
8	2	1	1	1
9	2	2	1	1
10	2	2	2	1

Sneak Attack: Any time the assassin's target would be denied her Dexterity bonus to AC (whether she actually has a Dexterity bonus or not), the assassin's attack deals +1d6 points of damage. This extra damage increases by +1d6 points every other level (+2d6 at 3rd level, +3d6 at 5th level, and so on). Should the assassin score a critical hit with a sneak attack, this extra damage is not multiplied.

It takes precision and penetration to hit a vital spot, so ranged attacks can only count as sneak attacks if the target is 30 feet away or less.

With a sap or an unarmed strike, the assassin can make a sneak attack that deals subdual damage instead of normal damage. He cannot use a weapon that deals normal damage to deal subdual damage in a sneak attack, not even with the usual -4 penalty, because he must make optimal use of his weapon in order to execute the sneak attack.

An assassin can only sneak attack living creatures with discernible anatomies—undead, constructs, oozes, plants, and incorporeal creatures lack vital areas to attack. Additionally, any creature immune to critical hits is similarly immune to sneak attacks. Also, the assassin must also be able to see the target well enough to pick out a vital spot and must be able to reach a vital spot. The assassin cannot sneak attack while striking at a creature with concealment or by striking the limbs of a creature whose vitals are beyond reach.

If an assassin gets a sneak attack bonus from another source (such as rogue levels), the bonuses to damage stack.

Death Attack: If the assassin studies his victim for 3 rounds and then makes a sneak attack with a melee weapon that successfully deals damage, the sneak attack has the additional effect of possibly either paralyzing or killing the target (assassin's choice). While studying the victim, the assassin can undertake other actions so long as his attention stays focused on the target and the target does not detect the assassin or recognize the assassin as an enemy. If the victim of such an attack fails her Fortitude saving throw (DC 10 + the assassin's class level + the assassin's Intelligence modifier) against the kill effect, she dies. If the saving throw fails against the paralysis effect, the victim's mind and body become enervated, rendering her completely helpless and unable to act for 1d6 rounds plus 1 round per level of the assassin. If the victim's saving throw succeeds, the attack is just a normal sneak attack. Once the assassin has completed the 3 rounds of study, he must make the death attack within the next 3 rounds. If a death attack is attempted and fails (the victim makes her save) or if the assassin does not launch the attack within 3 rounds of completing the study, 3 new rounds of study are required before he can attempt another death attack.

Poison Use: Assassins are trained in the use of poison and never risk accidentally poisoning themselves when applying poison to a blade.

Saving Throw Bonus vs. Poison: Assassins train with poisons of all types and slowly grow more and more resistant to their effects. This is reflected by a natural saving throw bonus to all poisons gained at 2nd level that increases by +1 for every two levels the assassin gains (+1 at 2nd level, +2 at 4th level, +3 at 6th level, and so on).

Uncanny Dodge: At 2nd level and above, the Assassin retains a Dexterity bonus to AC (if any) if caught flat-footed or struck by an invisible attacker.

At 5th level, the Assassin can no longer be flanked. A Rogue at least four levels higher can still flank.

At 10th level, the Assassin receives a +1 bonus to Reflex saves made to avoid traps and a +1 dodge bonus to AC against attacks by traps.

Spells: Beginning at 1st level, an assassin gains the ability to cast a small number of arcane spells. To cast a spell, the assassin must have an Intelligence score of at least 10 + the spell's level, so an assassin with an Intelligence of 10 or lower cannot cast these spells. Assassin bonus spells are based on Intelligence, and saving throws against these spells have a DC of 10 + spell level + the assassin's Intelligence modifier (if any). When the assassin gets 0 spells of a given level, such as 0 1st-level spells at 1st level, the assassin gets only bonus spells. An assassin without a bonus spell for that level cannot yet cast a spell of that level. The assassin's spell list appears below. An assassin prepares and casts spells just as a wizard does.

Assassins choose their spells from the following list:	
1st level	change self, detect poison, ghost sound, obscuring mist, spider climb.
2nd level	alter self, darkness, pass without trace, undetectable alignment.
3rd level	deeper darkness, invisibility, misdirection, nondetection.
4th level	dimension door, freedom of movement, improved invisibility, poison.

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rules

blackguard

From d20 SDR (e3.0):

Blackguard

Alignment: Any evil
Hit Die: d10

Requirements:

- **Base Attack Bonus:** +6.
- **Knowledge (religion):** 2 ranks.
- **Hide:** 5 ranks.
- **Feats:** Cleave, Sunder.
- **Special:** The blackguard must have made peaceful contact with an evil outsider who was summoned by him or someone else to have contracted the taint of true evil.

Class Skills: The blackguard’s class skills (and the key ability for each skill) are Concentration (Con), Craft (Int), Diplomacy (Cha), Handle Animal (Cha), Heal (Wis), Intimidate (Cha), Knowledge (religion) (Int), Profession (Wis), and Ride (Dex).

Weapon and Armor Proficiency: Blackguards are proficient with all simple and martial weapons, with all types of armor, and with shields.

Table: Blackguard

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+2	+0	+0	Detect good, poison use
2	+2	+3	+0	+0	Dark blessing, smite good
3	+3	+3	+1	+1	Command undead, aura of despair
4	+4	+4	+1	+1	Sneak attack +1d6
5	+5	+4	+1	+1	Fiendish servant
6	+6	+4	+2	+2	
7	+7	+5	+2	+2	Sneak attack +2d6
8	+8	+6	+2	+2	
9	+9	+6	+3	+3	
10	+10	+7	+3	+3	Sneak attack +3d6

Table: Blackguard Spells Per Day

Level	1st	2nd	3rd	4th
1	0	—	—	—
2	1	—	—	—
3	1	0	—	—
4	1	1	—	—

5	1	1	0	—
6	1	1	1	—
7	2	1	1	0
8	2	1	1	1
9	2	2	1	1
10	2	2	2	1

Detect Good: At will, the blackguard can detect good as a spell-like ability. This ability duplicates the effects of the spell detect good.

Poison Use: Blackguards are skilled in the use of poison and never risk accidentally poisoning themselves when applying poison to a blade.

Dark Blessing: A blackguard applies his Charisma modifier (if positive) as a bonus to all saving throws.

Spells: Beginning at 1st level, a blackguard gains the ability to cast a small number of divine spells. To cast a spell, the blackguard must have a Wisdom score of at least 10 + the spell's level, so a blackguard with a Wisdom of 10 or lower cannot cast these spells. Blackguard bonus spells are based on Wisdom, and saving throws against these spells have a DC of 10 + spell level + the blackguard's Wisdom modifier. When the blackguard gets 0 spells of a given level, such as 0 1st-level spells at 1st level, he gets only bonus spells. (A blackguard without a bonus spell for that level cannot yet cast a spell of that level.) The blackguard's spell list appears below. A blackguard has access to any spell on the list and can freely choose which to prepare, just like a cleric. A blackguard prepares and casts spells just as a cleric does (though the blackguard cannot spontaneously cast cure or inflict spells).

Blackguards choose their spells from the following list:	
1st level	cause fear, cure light wounds, doom, inflict light wounds, magic weapon, summon monster I*.
2nd level	bull's strength, cure moderate wounds, darkness, death knell, inflict moderate wounds, shatter, summon monster II*.
3rd level	contagion, cure serious wounds, deeper darkness, inflict serious wounds, protection from elements, summon monster III*.
4th level	cure critical wounds, freedom of movement, inflict critical wounds, poison, summon monster IV*.

* Evil creatures only.

Smite Good: Once a day, a blackguard of 2nd level or higher may attempt to smite good with one normal melee attack. He adds his Charisma modifier (if positive) to his attack roll and deals 1 extra point of damage per class level. For example, a 9th-level blackguard armed with a longsword would deal 1d8+9 points of damage, plus any additional bonuses from high Strength or magical effects that normally apply. If the blackguard accidentally smites a creature that is not good, the smite has no effect but it is still used up for that day. Smite good is a supernatural ability.

Aura of Despair: Beginning at 3rd level, the blackguard radiates a malign aura that causes enemies within 10 feet of him to suffer a -2 morale penalty on all saving throws. Aura of despair is a supernatural ability.

Command Undead: When a blackguard reaches 3rd level, he gains the supernatural

ability to command and rebuke undead. He commands undead as would a cleric of two levels lower.

Sneak Attack: If a blackguard can catch an opponent when she is unable to defend herself effectively from his attack, he can strike a vital spot for extra damage. Basically, any time the blackguard's target would be denied her Dexterity bonus to AC (whether she actually has a Dexterity bonus or not) or when the blackguard flanks the target, the blackguard's attack deals +1d6 points of damage at 4th level and an additional +1d6 points for every three levels thereafter (+2d6 at 7th level, +3d6 at 10th level, and so on). Should the blackguard score a critical hit with a sneak attack, this extra damage is not multiplied.

Ranged attacks only count as sneak attacks if the target is 30 feet away or less. A blackguard cannot make a sneak attack to deal subdual damage. The blackguard must be able to see the target well enough to pick out a vital spot and must be able to reach a vital spot. He cannot sneak attack while striking at a creature with concealment or by striking the limbs of a creature whose vitals are beyond reach.

A blackguard can only sneak attack living creatures with discernible anatomies. Undead, constructs, oozes, plants, and incorporeal creatures lack vital areas to attack. Additionally, any creature immune to critical hits is not subject to sneak attacks.

If a blackguard gets a sneak attack bonus from another source (such as rogue levels), the bonuses to damage stack.

Fiendish Servant: Upon or after reaching 5th level, a blackguard can call an unusually intelligent, strong, and loyal servant to aid him or her in her crusade against good. This servant is usually a fiendish bat, cat, dire rat, horse, pony, raven, or toad.

Should the blackguard's servant die, another cannot be called for a year and a day. The new servant has all the accumulated abilities due a mount of the blackguard's level.

The DM will provide information about the servant that responds to the blackguard's call.

Fallen Paladins

Blackguards who possess levels of paladin (that is to say, are now ex-paladins) gain extra abilities the more levels of paladin they possess. Those who have tasted the light of goodness and justice and turned away make the foulest villains.

Paladin Levels	Extra Ability
1-2	Smite good once per day. (This is in addition to the ability granted to all blackguards at 2nd level, so that a fallen paladin blackguard can smite good a total of twice per day.)
3-4	Lay on hands. Once per day, the blackguard can cure himself of damage equal to his Charisma bonus times his level. The blackguard can only cure himself or his fiendish servant with this spell-like ability.
5-6	Sneak attack damage increased by +1d6.
7-8	Fiendish summoning. Once per day, the blackguard can use a summon monster I spell to call forth an evil creature. For this spell, the caster level is double the

	blackguard's class level.
9-10	Undead companion. In addition to the fiendish servant, the blackguard gains (at 5th level) a Medium-size skeleton or zombie as a companion. This companion cannot be turned or rebuked by another and gains all special bonuses as a fiendish servant when the blackguard gains levels.
11+	Favored of the dark deities. Evil deities like nothing more than to see a pure heart corrupted, and thus a fallen paladin of this stature immediately gains a blackguard level for each level of paladin he trades in. For example, a character who has twelve levels of paladin can immediately become a 10th-level blackguard with all abilities if he chooses to lose ten levels of paladin. The character level of the character does not change. This, of course, is in every way a profitable trade for the evil character, since he has already lost most of the benefits he gained from having those paladin levels. However, with the loss of paladin levels, the character no longer gains extra abilities found on this table. Thus, a fallen paladin of 15th level could become a 10th-level blackguard/5th-level paladin with the first three extra abilities on this chart because of those five levels of paladin.

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dwarven defender

From d20 SDR (e3.0):

Dwarven Defender

Alignment: Any lawful

Hit Die: d12

Requirements:

- **Race:** Dwarf.
- **Base Attack Bonus:** +7.
- **Feats:** Dodge, Endurance, Toughness.

Class Skills: The defender's class skills (and the key ability for each skill) are Craft (Int), Listen (Wis), Sense Motive (Wis), and Spot (Wis).

Weapon and Armor Proficiency: The dwarven defender is proficient with all simple and martial weapons, all types of armor, and shields.

Table: Dwarven Defender

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	AC Bonus	Special
1	+1	+2	+0	+2	+1	Defensive stance 1/day
2	+2	+3	+0	+3	+1	Defensive awareness (Dex bonus to AC)
3	+3	+3	+1	+3	+1	Defensive stance 2/day
4	+4	+4	+1	+4	+2	
5	+5	+4	+1	+4	+2	Defensive stance 3/day
6	+6	+5	+2	+5	+2	Damage reduction (3), def. awareness (can't be flanked)
7	+7	+5	+2	+5	+3	Defensive stance 4/day
8	+8	+6	+2	+6	+3	
9	+9	+6	+3	+6	+3	Defensive stance 5/day
10	+10	+7	+3	+7	+4	Damage reduction (6), def. awareness (+1 vs. traps)

Defensive Stance: When he needs to, the defender can become a stalwart bastion of defense. In this defensive stance, a defender gains phenomenal strength and durability, but he cannot move from the spot he is defending. He gains the following benefits:

- +2 Strength
- +4 Constitution
- +2 resistance bonus on all saves

- +4 dodge bonus to AC

While defending, a defender cannot use skills or abilities that would require him to shift his position, such as Move Silently or Jump. A defensive stance lasts for 3 rounds, plus the character's (newly improved) Constitution modifier. The defender may end the defense voluntarily prior to this limit. At the end of the defense, the defender is winded and suffers a -2 penalty to Strength for the duration of that encounter. The defender can only take his defensive stance a certain number of times per day as determined by his level. Taking the stance takes no time itself, but the defender can only do so during his action.

Defensive Awareness: Starting at 2nd level, the dwarven defender gains the extraordinary ability to react to danger before his senses would normally allow him to even be aware of it. At 2nd level and above, he retains his Dexterity bonus to AC (if any) regardless of being caught flat-footed or struck by an invisible attacker. (He still loses any Dexterity bonus to AC if immobilized.)

At 6th level, the dwarven defender can no longer be flanked, since he can react to opponents on opposite sides of him as easily as he can react to a single attacker. This defense denies rogues the ability to use flank attacks to sneak attack the dwarven defender. The exception to this defense is that a rogue at least 4 levels higher than the dwarven defender can flank him (and thus sneak attack him).

At 10th level, the dwarven defender gains an intuitive sense that alerts him to danger from traps, giving him a +1 bonus to Reflex saves made to avoid traps.

Defensive awareness is cumulative with uncanny dodge. If the dwarven defender has another class that grants the uncanny dodge ability, add together all the class levels of the classes that grant these two abilities and determine the character's defensive awareness ability on that basis.

Damage Reduction: At 6th level, the dwarven defender gains the extraordinary ability to shrug off some amount of injury from each blow or attack. Subtract 3 from the damage the dwarven defender takes each time he is dealt damage. At 10th level, this damage reduction rises to 6. Damage reduction can reduce damage to 0 but not below 0. (That is, the defender cannot actually gain hit points in this manner.)

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rules

loremaster

From d20 SDR (e3.0):

Loremaster

Alignment: Any
Hit Die: d4

Requirements:

- **Spellcasting:** Ability to cast seven different divinations, one of which must be 3rd level or higher.
- **Two Knowledge Skills (Any Type):** 10 ranks in each.
- **Feats:** Any three metamagic or item creation feats, plus Skill Focus (Knowledge [any individual Knowledge skill]).

Class Skills: The loremaster’s class skills (and the key ability for each skill) are Alchemy (Int), Appraise (Int), Concentration (Con), Decipher Script (Int, exclusive skill), Gather Information (Cha), Handle Animals (Cha), Heal (Wis), Knowledge (all skills taken individually) (Int), Perform (Cha), Profession (Wis), Scry (Int), Speak Language, Spellcraft (Int), and Use Magic Device (Cha, exclusive skill).

Weapon and Armor Proficiency: Loremasters gain no proficiency in any weapon or armor.

Table: Loremaster

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special	Spellcasting
1	+1	+2	+2	+0	Secret	+1 level of existing class
2	+2	+3	+3	+0	Lore	+1 level of existing class
3	+3	+3	+3	+1	Secret	+1 level of existing class
4	+4	+4	+4	+1	Bonus language	+1 level of existing class
5	+5	+4	+4	+1	Secret	+1 level of existing class
6	+6	+5	+4	+2	Greater lore	+1 level of existing class
7	+7	+5	+5	+2	Secret	+1 level of existing class
8	+8	+6	+6	+2	Bonus language	+1 level of existing class
9	+9	+6	+6	+3	Secret	+1 level of existing

10	+10	+7	+7	+3	True lore	class +1 level of existing class
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Spellcasting: A loremaster continues training in magic as well as her field of research. Thus, when a new loremaster level is gained, the character gains new spells per day as if she had also gained a level in a spellcasting class she belonged to before she added the prestige class. She does not, however, gain any other benefit a character of that class would have gained (improved chance of controlling or rebuking undead, metamagic or item creation feats, and so on). This essentially means that she adds the level of loremaster to the level of some other spellcasting class the character has, then determines spells per day, spells known, and caster level accordingly.

If a character had more than one spellcasting class before she became a loremaster, she must decide to which class she adds each level of loremaster for purposes of determining spells per day when she adds the new level.

Secret: In their studies, loremasters stumble upon all sorts of applicable knowledge and secrets. At 1st level and every two levels afterward (3rd, 5th, 7th, and 9th levels), the loremaster chooses one secret from Table: Loremaster Secrets. Her level plus Intelligence modifier determines which secrets she can choose. She can't choose the same secret twice.

Table: Loremaster Secrets

Level + Int Modifier	Secret	Effect
1	Instant mastery	4 ranks of a skill in which the character has no ranks
2	Secret health	+3 hit points
3	Secrets of inner strength	+1 bonus to Will saves
4	The lore of true stamina	+1 bonus to Fortitude saves
5	Secret knowledge	+1 bonus to Reflex saves of avoidance
6	Weapon trick	+1 bonus to attack rolls
7	Dodge trick	+1 dodge bonus to AC
8	Applicable knowledge	Any one feat
9	Newfound arcana	1 bonus 1st-level spell*
10	More newfound arcana	1 bonus 2nd-level spell*

* As if gained through having a high ability score.

Lore: Loremasters gather knowledge. At 2nd level, they gain the ability to know legends or information regarding various topics, just like a bard can with bardic knowledge. The loremaster adds her level and her Intelligence modifier to the Knowledge check. See page 29 in the Player's Handbook for more information on bardic knowledge.

Bonus Languages: Loremasters, in their laborious studies, learn new languages in order to access more knowledge. The loremaster can choose any new language at 4th and 8th level.

Greater Lore: At 6th level, a loremaster gains the ability to identify magic items, as the spell, as an extraordinary ability. She may do this once per item examined.

True Lore: At 10th level, once per day a loremaster can use her knowledge to gain

the effects of a legend lore spell or an analyze dweomer spell. True lore is an extraordinary ability.

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rules

shadowdancer

From d20 SDR (e3.0):

Shadowdancer

Alignment: Any

Hit Die: d8

Requirements:

- **Move Silently:** 8 ranks.
- **Hide:** 10 ranks.
- **Perform:** 5 ranks.
- **Feats:** Dodge, Mobility, Combat Reflexes.

Class Skills: The shadowdancer's class skills (and the key ability for each skill) are Balance (Dex), Bluff (Cha), Decipher Script (Int, exclusive skill), Diplomacy (Cha), Disguise (Cha), Escape Artist (Dex), Hide (Dex), Jump (Str), Listen (Wis), Move Silently (Dex), Perform (Cha), Pick Pocket (Dex), Profession (Wis), Search (Int), Spot (Wis), Tumble (Dex), and Use Rope (Dex).

Weapon and Armor Proficiency: Shadowdancers are proficient with the club, crossbow (hand, light, or heavy), dagger (any type), dart, mace, morningstar, quarterstaff, rapier, sap, shortbow (normal and composite), and short sword. Shadowdancers are proficient with light armor but not with shields.

Table: Shadowdancer

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+0	+2	+0	Hide in plain sight
2	+2	+0	+3	+0	Evasion, darkvision, uncanny dodge (Dex bonus to AC)
3	+3	+1	+3	+1	Shadow illusion, summon shadow
4	+4	+1	+4	+1	Shadow jump (20 ft.)
5	+5	+1	+4	+1	Defensive roll, uncanny dodge (can't be flanked)
6	+6	+2	+4	+2	Shadow jump (40 ft.), summon shadow
7	+7	+2	+5	+2	Slippery mind
8	+8	+2	+6	+2	Shadow jump (80 ft.)
9	+9	+3	+6	+3	Summon shadow
10	+10	+3	+7	+3	Shadow jump (160 ft.), imp. evasion, uncanny dodge (+1 vs. traps)

Hide in Plain Sight: Shadowdancers can use the Hide skill even while being observed. As long as they are within 10 feet of some sort of shadow, shadowdancers can

hide themselves from view in the open without anything to actually hide behind. They cannot, however, hide in their own shadows. Hide in plain sight is a supernatural ability.

Evasion: At 2nd level, a shadowdancer gains evasion. If exposed to any effect that normally allows her to attempt a Reflex saving throw for half damage (such as a fireball), she takes no damage with a successful saving throw. The evasion ability can only be used if the shadowdancer is wearing light armor or no armor.

Darkvision: At 2nd level, a shadowdancer can see in the dark as though she were permanently under the affect of a darkvision spell. This is a supernatural ability.

Uncanny Dodge: At 2nd level and above, the shadowdancer retains her Dexterity bonus to AC (if any) if caught flat-footed or struck by an invisible attacker.

At 5th level, the shadowdancer can no longer be flanked. Another rogue at least four levels higher can still flank.

At 10th level, the shadowdancer receives a +1 bonus to Reflex saves made to avoid traps and a +1 dodge bonus to AC against attacks made by traps.

Shadow Illusion: When a shadowdancer reaches 3rd level, she can create visual illusions from surrounding shadows. This spell-like ability is identical to the arcane spell silent image and may be employed once per day.

Summon Shadow: At 3rd level, a shadowdancer can summon a shadow, an undead shade. Unlike a normal shadow, this shadow's alignment matches that of the shadowdancer. The summoned shadow cannot be turned, rebuked, or commanded by any third party. This shadow serves as a companion to the shadowdancer and can communicate intelligibly with the shadowdancer. Every third level gained by the shadowdancer allows her to summon an additional shadow and adds +2 HD (and the requisite base attack and base save bonus increases) to all her shadow companions.

If a shadow companion is destroyed, or the shadowdancer chooses to dismiss it, the shadowdancer must attempt a Fortitude saving throw (DC 15). If the saving throw fails, the shadowdancer loses 200 experience points per shadowdancer level. A successful saving throw reduces the loss by half, to 100 XP per prestige class level. The shadowdancer's experience can never go below 0 as the result of a shadow's dismissal or destruction. A destroyed or dismissed shadow companion cannot be replaced for a year and a day.

Shadow Jump: At 4th level, the shadowdancer gains the ability to travel between shadows as if by means of a dimension door spell. The limitation is that the magical transport must begin and end in an area with at least some shadow. The shadowdancer can jump up to a total of 20 feet each day in this way, although this may be a single jump of 20 feet or two jumps of 10 feet each. Every two levels thereafter, the distance a shadowdancer can jump each day doubles (40 feet at 6th level, 80 feet at 8th level, and 160 feet at 10th level). This amount can be split among many jumps, but each one, no matter how small, counts as a 10-foot increment. (A 6th-level shadowdancer who jumps 32 feet cannot jump again until the next day.)

Defensive Roll: Starting at 5th level, the shadowdancer can roll with a potentially lethal blow to take less damage from it. Once per day, when a shadowdancer would be reduced to 0 hit points or less by damage in combat (from a weapon or other blow, not a spell or special ability), the shadowdancer can attempt to roll with the damage. She makes a Reflex saving throw (DC = damage dealt) and, if successful, takes only half damage from the blow. She must be aware of the attack and able to react to it in order to execute her defensive roll. If she is in a situation that would deny her any Dexterity bonus to AC, she can't attempt the defensive roll.

Slippery Mind: This extraordinary ability, gained at 7th level, represents the shadowdancer's ability to wriggle free from magical effects that would otherwise control or compel her. If the shadowdancer is affected by an enchantment and fails her saving throw, 1 round later she can attempt her saving throw again. She only gets this one extra chance to succeed at her saving throw. If it fails as well, the spell's effects proceed normally.

Improved Evasion: This extraordinary ability, gained at 10th level, works like evasion (see above). The shadowdancer takes no damage at all on successful saving throws against attacks that allow a Reflex saving throw for half damage (breath weapon, fireball, and so on). What's more, she takes only half damage even if she fails her saving throw, since the shadowdancer's reflexes allow her to get out of harm's way with incredible speed.

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NPC classes

From d20 SDR (e3.0):

NPC Classes

“NPC” Classes are not balanced in combination with the Character Classes presented in the previous sections. They are designed to provide some level of detail to non-adventuring characters in the game. These classes are not as good as the basic character classes, and should rarely, if ever, be used by player characters.

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rules

adept

From d20 SDR (e3.0):

Adept

Alignment: Any
Hit Die: d6

Class Skills: The adept's class skills (and the key ability for each skill) are Alchemy (Int), Concentration (Con), Craft (Int), Handle Animal (Cha), Heal (Wis), Knowledge (all skills taken individually) (Int), Profession (Wis), Scry (Int, exclusive skill), Spellcraft (Int), and Wilderness Lore (Wis).

Weapon and Armor Proficiency: Adepts are skilled with all simple weapons. Adepts are not proficient with any type of armor nor with shields.

Table: Adept

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+0	+2	Summon familiar
2	+1	+0	+0	+3	
3	+1	+1	+1	+3	
4	+2	+1	+1	+4	
5	+2	+1	+1	+4	
6	+3	+2	+2	+5	
7	+3	+2	+2	+5	
8	+4	+2	+2	+6	
9	+4	+3	+3	+6	
10	+5	+3	+3	+7	
11	+5	+3	+3	+7	
12	+6/+1	+4	+4	+8	
13	+6/+1	+4	+4	+8	
14	+7/+2	+4	+4	+9	
15	+7/+2	+5	+5	+9	
16	+8/+3	+5	+5	+10	
17	+8/+3	+5	+5	+10	
18	+9/+4	+6	+6	+11	
19	+9/+4	+6	+6	+11	
20	+10/+5	+6	+6	+12	

Table: Adept Spells Per Day

Level	0	1st	2nd	3rd	4th	5th
1	3	1	—	—	—	—
2	3	1	—	—	—	—
3	3	2	—	—	—	—
4	3	2	0	—	—	—

5	3	2	1	—	—	—
6	3	2	1	—	—	—
7	3	3	2	—	—	—
8	3	3	2	0	—	—
9	3	3	2	1	—	—
10	3	3	2	1	—	—
11	3	3	3	2	—	—
12	3	3	3	2	0	—
13	3	3	3	2	1	—
14	3	3	3	2	1	—
15	3	3	3	3	2	—
16	3	3	3	3	2	0
17	3	3	3	3	2	1
18	3	3	3	3	2	1
19	3	3	3	3	3	2
20	3	3	3	3	3	2

Spells: An adept casts divine spells. She is limited to a certain number of spells of each spell level per day, according to her class level. Like a cleric, an adept may prepare and cast any spell on the adept list, provided she can cast spells of that level. Like a cleric, she prepares her spells ahead of time each day. The DC for a saving throw against an adept's spell is 10 + spell level + the adept's Wisdom modifier.

Adepts choose their spells from the following list:	
0 level	create water, cure minor wounds, detect magic, ghost sound, guidance, light, mending, purify food and drink, read magic.
1st level	bless, burning hands, cause fear, command, comprehend languages, cure light wounds, detect chaos, detect evil, detect good, detect law, endure elements, obscuring mist, protection from chaos, protection from evil, protection from good, protection from law, sleep.
2nd level	aid, animal trance, bull's strength, cat's grace, cure moderate wounds, darkness, delay poison, endurance, invisibility, mirror image, resist elements, see invisibility, web.
3rd level	animate dead, bestow curse, contagion, continual flame, cure serious wounds, daylight, deeper darkness, lightning bolt, neutralize poison, remove curse, remove disease, tongues.
4th level	cure critical wounds, minor creation, polymorph other, polymorph self, restoration, stoneskin, wall of fire.
5th level	break enchantment, commune, heal, major creation, raise dead, true seeing, wall of stone.

Adepts, unlike wizards, do not acquire their spells from books or scrolls, nor prepare them through study. Instead, they meditate or pray for their spells, receiving them as divine inspiration or through their own strength of faith. Each adept must choose a time each day at which she must spend an hour in quiet contemplation or supplication to regain her daily allotment of spells. Time spent resting has no effect on whether an adept can prepare spells.

When the adept gets 0 spells of a given level, she gets only bonus spells for that spell slot. An adept without a bonus spell for that level cannot yet cast a spell of that level. Bonus spells are based on Wisdom.

Each adept has a particular holy symbol (as a divine focus) depending on the adept's magical tradition.

Familiar: At 2nd level, an adept can call a familiar, just like a sorcerer or wizard can.

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rules

aristocrat

From d20 SDR (e3.0):

Aristocrat

Alignment: Any

Hit Die: d8

Class Skills: The aristocrat's class skills (and the key ability for each skill) are Appraise (Int), Bluff (Cha), Diplomacy (Cha), Disguise (Cha), Forgery (Int), Gather Information (Cha), Handle Animal (Cha), Innuendo (Wis), Intimidate (Cha), Knowledge (all skills taken individually) (Int), Listen (Wis), Perform (Cha), Read Lips (Int, exclusive skill), Ride (Dex), Sense Motive (Wis), Speak Language, Spot (Wis), Swim (Str), and Wilderness Lore (Wis).

Weapon and Armor Proficiency: The aristocrat is proficient in the use of all simple and martial weapons and with all types of armor and shields.

Table: Aristocrat

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+0	+2	
2	+1	+0	+0	+3	
3	+2	+1	+1	+3	
4	+3	+1	+1	+4	
5	+3	+1	+1	+4	
6	+4	+2	+2	+5	
7	+5	+2	+2	+5	
8	+6/+1	+2	+2	+6	
9	+6/+1	+3	+3	+6	
10	+7/+2	+3	+3	+7	
11	+8/+3	+3	+3	+7	
12	+9/+4	+4	+4	+8	
13	+9/+4	+4	+4	+8	
14	+10/+5	+4	+4	+9	
15	+11/+6/+1	+5	+5	+9	
16	+12/+7/+2	+5	+5	+10	
17	+12/+7/+2	+5	+5	+10	
18	+13/+8/+3	+6	+6	+11	
19	+14/+9/+4	+6	+6	+11	
20	+15/+10/+5	+6	+6	+12	

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rules

commoner

From d20 SDR (e3.0):

Commoner

Alignment: Any

Hit Die: d4

Class Skills: The commoner's class skills (and the key ability for each skill) are Climb (Str), Craft (Int), Handle Animal (Cha), Jump (Str), Listen (Wis), Profession (Wis), Ride (Dex), Spot (Wis), Swim (Str), and Use Rope (Dex).

Weapon and Armor Proficiency: The commoner is proficient with one simple weapon. He is not proficient with any other weapons, nor is he proficient with any type of armor or shields.

Table: Commoner

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+0	+0	
2	+1	+0	+0	+0	
3	+1	+1	+1	+1	
4	+2	+1	+1	+1	
5	+2	+1	+1	+1	
6	+3	+2	+2	+2	
7	+3	+2	+2	+2	
8	+4	+2	+2	+2	
9	+4	+3	+3	+3	
10	+5	+3	+3	+3	
11	+5	+3	+3	+3	
12	+6/+1	+4	+4	+4	
13	+6/+1	+4	+4	+4	
14	+7/+2	+4	+4	+4	
15	+7/+2	+5	+5	+5	
16	+8/+3	+5	+5	+5	
17	+8/+3	+5	+5	+5	
18	+9/+4	+6	+6	+6	
19	+9/+4	+6	+6	+6	
20	+10/+5	+6	+6	+6	

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rules

expert

From d20 SDR (e3.0):

Expert

Alignment: Any

Hit Die: d6

Class Skills: The expert can choose any ten skills to be class skills. One or two of these skills can be skills exclusive to some other class.

Weapon and Armor Proficiency: The expert is proficient in the use of all simple weapons and with light armor but not shields.

Table: Expert

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+0	+0	+0	+2	
2	+1	+0	+0	+3	
3	+2	+1	+1	+3	
4	+3	+1	+1	+4	
5	+3	+1	+1	+4	
6	+4	+2	+2	+5	
7	+5	+2	+2	+5	
8	+6/+1	+2	+2	+6	
9	+6/+1	+3	+3	+6	
10	+7/+2	+3	+3	+7	
11	+8/+3	+3	+3	+7	
12	+9/+4	+4	+4	+8	
13	+9/+4	+4	+4	+8	
14	+10/+5	+4	+4	+9	
15	+11/+6/+1	+5	+5	+9	
16	+12/+7/+2	+5	+5	+10	
17	+12/+7/+2	+5	+5	+10	
18	+13/+8/+3	+6	+6	+11	
19	+14/+9/+4	+6	+6	+11	
20	+15/+10/+5	+6	+6	+12	

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rules

warrior

From d20 SDR (e3.0):

Warrior

Alignment: Any

Hit Die: d8

Class Skills: The warrior's class skills (and the key ability for each skill) are Climb (Str), Handle Animal (Cha), Intimidate (Cha), Jump (Str), Ride (Dex), and Swim (Str).

Weapon and Armor Proficiency: The warrior is proficient in the use of all simple and martial weapons and all armor and shields.

Table: Warrior

Class Level	Base Attack Bonus	Fort Save	Ref Save	Will Save	Special
1	+1	+2	+0	+0	
2	+2	+3	+0	+0	
3	+3	+3	+1	+1	
4	+4	+4	+1	+1	
5	+5	+4	+1	+1	
6	+6/+1	+5	+2	+2	
7	+7/+2	+5	+2	+2	
8	+8/+3	+6	+2	+2	
9	+9/+4	+6	+3	+3	
10	+10/+5	+7	+3	+3	
11	+11/+6/+1	+7	+3	+3	
12	+12/+7/+2	+8	+4	+4	
13	+13/+8/+3	+8	+4	+4	
14	+14/+9/+4	+9	+4	+4	
15	+15/+10/+5	+9	+5	+5	
16	+16/+11/+6/+1	+10	+5	+5	
17	+17/+12/+7/+2	+10	+5	+5	
18	+18/+13/+8/+3	+11	+6	+6	
19	+19/+14/+9/+4	+11	+6	+6	
20	+20/+15/+10/+5	+12	+6	+6	

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rules

advantages

Skills based RPGs (as contrasted with class based RPGs) often let players choose from lists of advantages and disadvantages at the time of character creation. At least one RPG has a system of minor advantages and disadvantages called quirks, which allow for customization of personality without wasting valuable character creation points.

The following are the names and costs of the advantages from the Third Edition Basic Set of *GURPS*.

name	point cost	notes
Absolute Direction	5 points	
Absolute Timing	5 points	
Acute Hearing	2 points/level	
Acute Taste and Smell	2 points/level	
Acute Vision	2 points/level	
Alertness	5 points/level	
Ambidexterity	10 points	
Animal Empathy	5 points	
Attractiveness	Variable	(see page 15 of 3rd ed. Basic Rule Book)
Charisma	5 points/level	
Clerical Investment	5 or more points	GM's discretion
Combat Reflexes	15 points	
Common Sense	10 points	
Danger Sense	15 points	
Double-Jointed	5 points	
Eidetic Memory	30/60 points	
Empathy	15 points	
High Pain Threshold	10 points	
Immunity to Disease	10 points	
Intuition	15 points	
Language Talent	2 points/level	
Legal Enforcement Powers	5, 10, 05 15 points	
Lightning Calculator	5 points	

Literacy	0 or 10 points	
Longevity	5 points	
Luck	15 or 30 points	
	15 points for first	
Magical Aptitude	level	
(Magery)	10 points/level	
	afterward	
Magic Resistance	2 points/level	
Mathematical Ability	10 points	
Military Rank	5 points/level of	
	rank	
Musical Ability	1 point/level	
Night Vision	10 points	
Peripheral Vision	15 points	
Psionic Resistance	2 points/level	
Rapid Healing	5 points	
Reputation	Variable	(see page 17 of 3rd ed. Basic Rule Book)
Status	Variable	(see page 18 of 3rd ed. Basic Rule Book)
Toughness	10/25 points	
Unusual Background	10 or more points	
Voice	10 points	
Wealth	Variable	(see page 16 of 3rd ed. Basic Rule Book)
Allies	Variable	(see page 23 of 3rd ed. Basic Rule Book)
Patrons	Variable	(see page 24 of 3rd ed. Basic Rule Book)

rules

disadvantages

Skills based RPGs (as contrasted with class based RPGs) often let players choose from lists of advantages and disadvantages at the time of character creation. At least one RPG has a system of minor advantages and disadvantages called quirks, which allow for customization of personality without wasting valuable character creation points.

The following are the names and costs of the disadvantages from the Third Edition Basic Set of *GURPS*.

kind	name	point cost	notes
Social	Odious Personal Habits	-5, -10, -15 points	
Social	Poverty	Variable	(see page 16 of 3rd ed. Basic Rule Book)
Social	Primitive	-5 points per tech level	
Social	Reputation	Variable	(see page 17 of 3rd ed. Basic Rule Book)
Social	Social Stigma	-5, -10, -15, -20 points	
Social	Status	variable	(see page 18 of 3rd ed. Basic Rule Book)
Physical	Age	-3 points per year over 50	
Physical	Albinism	-10 points	
Physical	Bad Sight	-10/-25 points	
Physical	Blindness	-50 points	
Physical	Color Blindness	-10 points	
Physical	Deafness	-20 points	
Physical	Dwarfism	-15 points	
Physical	Epilepsy	-30 points	
Physical	Eunuch	-5 points	
Physical	Fat	-10/-20 points	
Physical	Gigantism	-10 points	
Physical	Hard of Hearing	-10 points	

Physical	Hemophilia	-30 points	
Physical	Lame	-15, -25, or -35 points	
Physical	Low Pain Thresheold	-10 points	
Physical	Mute	-25 points	
Physical	No Sense of Smell/Taste (Anosmia)	-5 points	
Physical	One Arm	-20 points	
Physical	One Eye	-15 points	
Physical	One Hand	-15 points	
Physical	One Leg	-25 points	
Physical	Overwiegth	-5 points	
Physical	Skinny	-5 points	
Physical	Stuttering	-10 points	
Physical	Youth	-2 to -6 points	
Mental	Absent-Mindedness	-15 points	
Mental	Addiction	Variable	(see page 30 of 3rd ed. Basic Rule Book)
Mental	Alcoholism	-15 or -20 points	
Mental	Bad Temper	-10 points	
Mental	Berserk	-15 points	
Mental	Bloodlust	-10 points	
Mental	Bully	-10 points	
Metnal	Code of Honor	-5 to -15 points	
Mental	Combat Paralysis	-15 points	
Mental	Compulsive Behavior	-5 to -15 points	
Mental	Comulsive Lying	-15 points	
Mental	Cowardice	-10 points	
Mental	Delusions	-1, -5, -10, or -15 points	
Mental	Dyslexia	-5 or -15 points	(see page 32 of 3rd ed. Basic Rule Book)
Mental	Fanatacism	-15 points	
Mental	Gluttony	-5 points	
Mental	Greed	-15 points	
Mental	Gullibility	-10 points	

Mental	Honesty	-10 points	
Mental	Illiteracy	0 or -10 points	
Mental	Impulsiveness	-10 points	
Mental	Intolerance	-5/-10 points	
Mental	Jealousy	-10 points	
Mental	Kleptomaniac	-15 points	
Mental	Laziness	-10 points	
Mental	Lecherousness	-15 points	
Mental	Megalomania	-10 points	
Mental	Miserliness	-10 points	
Mental	Overconfidence	-10 points	
Mental	Pacifism	-15 or -30 points	
Mental	Paranoia	-10 points	
Mental	Phobias	Variable	(see page 35 of 3rd ed. Basic Rule Book)
Mental	Pyromania	-5 points	
Mental	Sadism	-15 points	
Mental	Sense of Duty	-5, -10, -15, -20 points	(see page 39 of 3rd ed. Basic Rule Book)
Mental	Shyness	-5, -10, -15 points	
Mental	Split Personality	-10 or -15 points	
Mental	Stubbornness	-5 points	
Mental	Truthfulness	-5 points	
Mental	Unluckiness	-10 points	
Mental	Vow	-1 to -15 points	
Mental	Weak Will	-8 points/level	
Dependents		Variable	(see page 38 of 3rd ed. Basic Rule Book)
Enemies		Variable	(see page 39 of 3rd ed. Basic Rule Book)

rules quirks

Skills based RPGs (as contrasted with class based RPGs) often let players choose from lists of advantages and disadvantages at the time of character creation. At least one RPG has a system of minor advantages and disadvantages called quirks, which allow for customization of personality without wasting valuable character creation points.

Examples from the Third Edition Basic Set of *GURPS* include beliefs and goals, dislikes, likes, habits or expressions, or anything else.



image by pendleburyannette from Pixabay

rules

skills

While skills can be available as options in class-based RPGs, they are central to character creation and game play in skill-based RPGs. In a skill-based RPG, the player typically spends a starting allotment of points on skills. As the character advances, the player gets more points to purchase additional skills.



image by Gerd Altmann from Pixabay

The *D&D Conversion Manual* by Skip Williams, August 2000, provided charts for the conversion of AD&D (1st or 2nd edition) nonweapon proficiencies into D&D (3rd edition) skills>

Agriculture → Profession (farmer)

Ancient History → Knowledge (history)

Animal Handling → Handle Animal

Animal Lore → Wilderness Lore — the Wilderness Lore skill includes the Old Animal Lore, Fire-building, Set Snares, and Survival proficiencies.

Animal Training → Handle Animal

Appraising → Appraise

Artistic Ability → Craft (any)

Astrology → Knowledge (astrology)

Blacksmithing → Craft (blacksmithing)

Blind-fighting → Blind-Fight (feat, not a skill)

Bowyer/Fletcher → Craft (bowyer)

Brewing → Craft (brewing)

Carpentry → Craft (carpentry)

Charioteering → Handle Animal

Cobbling → Craft (cobbling)

Cooking → Craft (cooking)

Dancing → Perform (dancing)

Direction Sense → Intuit Direction

Disguise → Disguise

Engineering → Profession (engineer)

Etiquette → Diplomacy

Fire-building → Wilderness Lore — the Wilderness Lore skill includes the Old Animal Lore, Fire-building, Set Snares, and Survival proficiencies.

Fishing → Profession (fishing)

Forgery → Forgery

Gaming → Profession (gambler)

Gem Cutting → Craft (gem-cutting)

Healing → Heal

Heraldry → Knowledge (heraldry)

Herbalism → Profession (herbalist)

Hunting → Profession (hunter)

Juggling → Perform (juggling)

Jumping → Jump

Languages, Ancient → Speak Language

Languages, Modern → Speak Language

Leatherworking → Craft (leatherworking)

Local History → Knowledge (history)

Mining → Profession (miner)

Mountaineering → Climb

Musical Instrument → Perform (musical instrument)

Navigation → Profession (navigator)

Pottery → Craft (pottery)

Reading Lips → Read Lips

Reading/Writing → literacy is free and doesn't require spending skill points

Religion → Knowledge (religion)

Running → Run (feat, not a skill)

Riding, Airborne → Ride

Riding, Land-based → Ride

Rope Use → Use Rope

Seamanship → Profession (sailor)

Seamstress/Tailor → Craft (sewing)

Set Snares → Wilderness Lore — the Wilderness Lore skill includes the Old Animal Lore, Fire-building, Set Snares, and Survival proficiencies.

Singing → Perform (singing)

Spellcraft → Spellcraft

Stonemasonry → Craft (stonemasonry)

Survival → Wilderness Lore — the Wilderness Lore skill includes the Old Animal Lore, Fire-building, Set Snares, and Survival proficiencies.

Swimming → Swim

- Tightrope Walking → Balance
- Tracking → Track (feat, not a skill)
- Tumbling → Tumble
- Ventriloquism → Perform (ventriloquism)
- Weaponsmithing → Craft (weaponsmith)
- Weather Sense → Knowledge (weather)
- Weaving → Craft (weaaving)

From d20 SDR (e3.0):

Skills Overview

Characters have a number of skill points based on their race and their class levels.

Depending on a characters’ race and class, some skills are “class skills” and some skills are “cross-class skills” Cross-class skills require 2 skill points per rank, class skills require 1 skill point per rank.

The maximum number of ranks a character can have in a class skill is equal to that character’s level +3. The maximum ranks a character can have in a cross-class skill is half that number.

Starting skill points for the basic character classes are:

Character Class	1st-Level Skill Points	Higher Level Skill Points
Adept	(2 + Int Modifier) x 4	2 + Int Modifier
Aristocrat	(4 + Int Modifier) x 4	4 + Int Modifier
Arcane Archer	N/A	4 + Int Modifier
Assassin	N/A	4 + Int Modifier
Barbarian	(4 + Int Modifier) x 4	4 + Int Modifier
Bard	(4 + Int Modifier) x 4	4 + Int Modifier
Blackguard	NA	2 + Int Modifier
Cleric	(2 + Int Modifier) x 4	2 + Int Modifier
Commoner	(2 + Int Modifier) x 4	2 + Int Modifier
Druid	(4 + Int Modifier) x 4	4 + Int Modifier
Dwarven Defender	N/A	2 + Int Modifier
Expert	(6 + Int Modifier) x 4	6 + Int Modifier
Fighter	(2 + Int Modifier) x 4	2 + Int Modifier
Loremaster	N/A	4 + Int Modifier

Monk	$(4 + \text{Int Modifier}) \times 4$	$4 + \text{Int Modifier}$
Paladin	$(2 + \text{Int Modifier}) \times 4$	$2 + \text{Int Modifier}$
Ranger	$(4 + \text{Int Modifier}) \times 4$	$4 + \text{Int Modifier}$
Rogue	$(8 + \text{Int Modifier}) \times 4$	$8 + \text{Int Modifier}$
Shadowdancer	N/A	$6 + \text{Int Modifier}$
Sorcerer	$(2 + \text{Int Modifier}) \times 4$	$2 + \text{Int Modifier}$
Warrior	$(2 + \text{Int Modifier}) \times 4$	$2 + \text{Int Modifier}$
Wizard	$(2 + \text{Int Modifier}) \times 4$	$2 + \text{Int Modifier}$

Using Skills

When the character uses a skill, the character makes a skill check to see how well the character does. The higher the result on the character's skill check, the better the character does. Based on the circumstances, the character's result must match or beat a particular number to use the skill successfully. The harder the task, the higher the number the character needs to roll.

Skill Checks

To make a skill check, roll 1d20 and add the character's skill modifier for that skill. The skill modifier incorporates the character's rank with that skill, the character's ability modifier for that skill's key ability, and any other miscellaneous modifiers the character has, including racial bonuses and any armor check penalty. The higher the result, the better. A natural 20 is not an automatic success, and a natural 1 is not an automatic failure.

Vs. a Difficulty Class

Some checks are made against a Difficulty Class (DC). The DC is a number that the character must score as a result on the character's skill check to succeed.

Vs. Opposed Checks

Some skill checks are opposed checks. They are made against a randomized number, which is usually another character's skill check result. Whoever gets the higher result wins the contest.

For ties on opposed checks, the character with the higher key ability score wins.

If these scores are the same, flip a coin.

Retries

In general, the character can try a skill check again if the character fails, and can keep trying indefinitely. Some skills, however, have consequences of failure that must be taken into account. Some skills are virtually useless once a check has failed on an attempt to accomplish a particular task. For most skills, when a character has succeeded once at a given task, additional successes are meaningless.

If a skill carries no penalties for failure, the character can take 20 and assume that the character goes at it long enough to succeed eventually.

Untrained Skill Checks

Generally, if the character attempts to use a skill the character doesn't possess, the character makes a skill check as normal. The character's skill modifier doesn't have the character's skill rank added in because the character doesn't have any ranks in the skill. The character does get other modifiers added into the skill modifier, though, such as the ability modifier for the skill's key ability.

Many skills can only be used if the character is trained in the skill. Skills that cannot be used untrained are marked with a "No" in the "Untrained" column on Table: Skills.

Favorable and Unfavorable Conditions

Some situations may make a skill easier or harder to use, resulting in a bonus or penalty added into the skill modifier for the skill check or a change to the DC of the skill check.

The DM can alter the odds of success in four ways to take into account exceptional circumstances:

1. Give the skill user a +2 circumstance bonus to represent circumstances that improve performance.
2. Give the skill user a -2 circumstance penalty to represent conditions that hamper performance.
3. Reduce the DC by 2 to represent circumstances that make the task easier.
4. Increase the DC by 2 to represent circumstances that make the task harder.

A bonus to the character's skill modifier and a reduction in the check's DC have the same result: they create a better chance that the character will succeed. But they represent different circumstances, and sometimes that difference is important.

Time and Skill Checks

Using a skill might take a round, take no time, or take several rounds or even longer. Most skill uses are standard actions, move-equivalent actions, or full-round actions. Types of actions define how long activities take to perform within the framework of a combat round (6 seconds) and how movement is treated with respect to the activity. Some skill checks are instant and represent reactions to an event, or are included as part of an action. These skill checks are not actions. Other skill checks represent part of movement. The distance the character jumps when making a Jump check, for example, is part of the character's movement. Some skills take more than a round to use, and the skill descriptions often specify how long these skills take to use.

Practically Impossible Tasks

In general, to do something that's practically impossible requires that the character have at least rank 10 in the skill and entails a penalty of -20 on the character's roll or +20 on the DC (which amounts to about the same thing).

Practically impossible tasks are hard to delineate ahead of time. They're the accomplishments that represent incredible, almost logic-defying skill and luck.

The DM decides what is actually impossible and what is merely practically impossible.

Extraordinary Success

If the character has at least rank 10 in a skill and beats the DC by 20 or more on a normal skill check, the character has completed the task impossibly well.

Skill Checks Without Rolls

Taking 10: When the character is not in a rush and is not being threatened or distracted, the character may choose to take 10. Instead of rolling 1d20 for the skill check, calculate the character's result as if the character had rolled a 10.

Taking 20: When the character has plenty of time (generally 2 minutes for a skill that can normally be checked in 1 round, one full-round action, or one standard action), and when the skill being attempted carries no penalties for failure, the character can take 20.

Instead of rolling 1d20 for the skill check, calculate the character's result as if the character had rolled a 20. Taking 20 means the character is trying until the character gets it right. Taking 20 takes about twenty times as long as making a single check would take.

Combining Skill Checks

When more than one character tries the same skill at the same time and for the same purpose, their efforts may overlap.

Individual Events: Often, several characters attempt some action and each succeeds or fails on her own.

Helping the Leader: Sometimes the individual PCs are essentially reacting to the same situation, but they can work together and help each other out. In this case, one character is considered the leader of the effort and makes a skill check while each helper makes a skill check against DC 10. (the character can't take 10 on this check.) For each helper who succeeds, the leader gets a +2 circumstance bonus (as per the rule for favorable conditions). In many cases, a character's help won't be beneficial, or only a limited number of characters can help at once. The DM limits cooperation as she sees fit for the given conditions.

Skill Synergy: It's also possible for a character to have two skills that work well together. In general, having 5 or more ranks in one skill gives the character a +2 synergy bonus on skill checks with its synergistic skills, as noted in the skill description.

Ability Checks

Sometimes the character tries to do something to which no specific skill really applies. In these cases, the character makes an ability check. An ability check is the roll of 1d20 plus the appropriate ability modifier. Essentially, the character is making an untrained skill check. The DM assigns a Difficulty Class.

Skill Description Format

Skill Name ([KEY ABILITY]; TRAINED ONLY; ARMOR CHECK PENALTY; [CLASS NAME] ONLY)

The skill name line includes the following information:

Key Ability: The abbreviation of the ability whose modifier applies to the skill check. Exception: Speak Language has “None” listed as its key ability because the use of this skill does not require a check.

Trained Only: If “Trained Only” is included in the skill name line, the character must have at least 1 rank in the skill to use it. If it is omitted, the skill can be used untrained (with a rank of 0). If any special notes apply to trained or untrained use, they are covered in the Special section (see below).

Armor Check Penalty: Apply any armor check penalty to skill checks for this skill.

[Class Name] Only: The skill is exclusive to a certain class or classes. No character not of these classes can take the skill. If omitted, the skill is not exclusive.

The skill name line is followed by a general description of what using the skill represents. After the description are three other types of information:

- **Check:** What the character can do with a successful skill check, how much time it takes to make a check, and the check's DC.
- **Retry:** Any conditions that apply to successive attempts to use the skill successfully. If this paragraph is omitted, the skill can be retried without any inherent penalty other than consuming additional time.
- **Special:** Any extra facts that apply to the skill, such as rules regarding untrained use, or if this skill has a synergistic relationship with other skills, or benefits that certain characters receive because of class or race

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From d20 SDR (e3.0):

Skills

This section describes each skill, including common uses and typical modifiers.

Alchemy (INT)

TRAINED ONLY

Check: The character can make alchemical items. Some items the character can make are found in the item descriptions. To determine how much time and material it takes to make an alchemical item, use the DCs listed below and the rules for making things found in the Craft skill description.

The DM may allow an alchemist to perform other tasks related to alchemy, such as identifying an unknown substance or a poison. Doing so takes 1 hour.

Task	DC	Notes
Identify substance	25	Costs 1 gp per attempt (or 20 gp to take 20)
Identify potion	25	Costs 1 gp per attempt (or 20 gp to take 20)
Make acid	15	See Craft skill
Identify poison	20	
Make alchemist's fire, smokestick, or tindertwig	20	See Craft skill
Make antitoxin, sunrod, tanglefoot bag, or thunderstone	25	See Craft skill

Retry: Yes, but in the case of making items, each failure ruins the half the raw materials needed, and the character has to pay half the raw material cost again. For identifying substances or potions, each failure consumes the cost per attempt.

Special: The character must have alchemical equipment to make an item or identify it. For identifying items, the cost represents additional supplies the character must buy. Purchasing and maintaining an alchemist's lab grants a +2 circumstance bonus to Alchemy checks (from the favorable condition of having the perfect tools for the job) but does not affect the cost of any items made using the skill.

Animal Empathy (CHA)

TRAINED ONLY; DRUID, RANGER ONLY

Check: The character can improve the attitude of an animal with a successful check. To use the skill, the character and the animal must be able to study each other, noting each other's body language, vocalizations, and general demeanor. This means that the character must be within 30 feet under normal conditions.

Generally, influencing an animal in this way takes 1 minute, but, as with influencing people, it might take more or less time.

This skill works on animals. The character can use it with a -4 penalty on beasts and magical beasts.

Retry: As with attempts to influence people, retries on the same animal generally don't work (or don't work any better), whether the character has succeeded or not.

Appraise (Int)

Check: The character can appraise common or well-known objects within 10% of

their value (DC 12). Failure means the character estimates the value at 50% to 150% of actual value. The DM secretly rolls $2d6+3$, multiplies by 10%, multiplies the actual value by that percentage, and tells the character that value for the item. (For a common or well-known item, the character's chance of estimating the value within 10% is fairly high even if the character fails the check—in such a case, the character made a lucky guess.)

Rare or exotic items require a successful check against DC 15, 20, or higher. If successful, the character estimates the value at 70% to 130% of its actual value. The DM secretly rolls $2d4+5$, multiplies by 10%, multiplies the actual value by that percentage, and tells the character that value for the item. Failure means the character cannot estimate the item's value.

A magnifying glass gives a +2 circumstance bonus to Appraise checks involving any item that is small or highly detailed, such as a gem. A merchant's scale gives a +2 circumstance bonus to Appraise checks involving any items that are valued by weight, including anything made of precious metals. These bonuses stack.

Appraising an item takes 1 minute.

Retry: Not on the same object, regardless of success.

Special: If the character is making the check untrained, for common items, failure means no estimate, and for rare items, success means an estimate of 50% to 150% ($2d6+3$ times 10%).

Balance (DEX)

ARMOR CHECK PENALTY

Check: The character can walk on a precarious surface as a move-equivalent action. A successful check lets the character move at half the character's speed along the surface for 1 round. A failure means that the character can't move for 1 round. A failure by 5 or more means that the character falls.

The difficulty varies with the surface:

Surface	DC
7-12 inches wide	10
2-6 inches wide	15
Less than 2 inches wide	20
Uneven Floor	10
Surface Angled	+5*
Surface Slippery	+5*

* Cumulative; if both apply, use both.

Being Attacked while Balancing: Attacks against the character are made as if the character were off balance: They gain a +2 attack bonus, and the character loses any Dexterity bonus to AC. If the character has 5 or more ranks in Balance, then the character can retain the Dexterity bonus to AC (if any) in the face of attacks. If the

character takes damage, the character must make a check again to stay balanced.

Accelerated Movement: The character can try to walk a precarious surface more quickly than normal. If the character accepts a -5 penalty, the character can move at normal speed as a move-equivalent action. (Moving twice the character's speed in a round requires two checks.)

Special: If the character has 5 or more ranks in Tumble, the character gets a +2 synergy bonus on Balance checks.

Bluff (CHA)

Check: A Bluff check is opposed by the target's Sense Motive check. Favorable and unfavorable circumstances weigh heavily on the outcome of a bluff. Two circumstances can weigh against the character: The bluff is hard to believe, or the action that the target is to take goes against the target's self-interest, nature, personality, orders, etc. If it's important, the DM can distinguish between a bluff that fails because the target doesn't believe it and one that fails because it just asks too much of the target. For instance, if the target gets a +10 bonus because the bluff demands something risky of the target, and the Sense Motive check succeeds by 10 or less, then the target didn't so much see through the bluff as prove reluctant to go along with it. If the target succeeds by 11 or more, he has seen through the bluff (and would have done so even if it had not entailed any demand on him).

A successful Bluff check indicates that the target reacts as the character wishes, at least for a short time (usually 1 round or less) or believes something that the character wants him to believe.

A bluff requires interaction between the character and the target. Creatures unaware of the character cannot be bluffed. A bluff always takes at least 1 round (and is at least a full-round action) but can take much longer if the character tries something elaborate.

Feinting in Combat: The character can also use Bluff to mislead an opponent in combat so that he can't dodge the character's attack effectively. Doing so is a miscellaneous standard action that does not draw an attack of opportunity. If the character is successful, the next attack the character makes against the target does not allow him to use his Dexterity bonus to Armor Class (if any). This attack must be made on or before your next turn. Feinting in this way against a nonhumanoid is difficult because it's harder to read a strange creature's body language; the character suffers a -4 penalty. Against a creature of animal Intelligence (1 or 2) it's even harder; the character suffers a -8 penalty. Against a nonintelligent creature, it's impossible.

Creating a Diversion to Hide: The character can use Bluff to help the character hide. A successful Bluff check can give the character the momentary diversion the character needs to attempt a Hide check while people are aware of the character.

Retry: Generally, a failed Bluff check makes the target too suspicious for a bluffer to try another one in the same circumstances. For feinting in combat, the character may retry freely.

Special: Having 5 or more ranks in Bluff gives the character a +2 synergy bonus on Intimidate and Pick Pocket checks and a +2 synergy bonus on an Innuendo check to transmit a message. Also, if the character has 5 or more ranks of Bluff, the character gets a +2 synergy bonus on Disguise checks when the character knows that the character is being observed and the character tries to act in character.

Climb (STR)

ARMOR CHECK PENALTY

Check: With each successful Climb check, the character can advance up, down, or across a slope or a wall or other steep incline (or even a ceiling with handholds) one-half the character's speed as a miscellaneous full-round action. The character can move half that far, one-fourth of the character's speed, as a miscellaneous move-equivalent action. A slope is considered to be any incline of less than 60 degrees; a wall is any incline of 60 degrees or steeper.

A failed Climb check means that the character makes no progress, and a check that fails by 5 or more means that the character falls from whatever height the character has already attained.

A climber's kit gives a +2 circumstance bonus to Climb checks.

The DC of the check depends on the conditions of the climb.

DC	Example Wall or Surface
0	A slope too steep to walk up. A knotted rope with a wall to brace against.
5	A rope with a wall to brace against, or a knotted rope, or a rope affected by the rope trick spell.
10	A surface with ledges to hold on to and stand on, such as a very rough wall or a ship's rigging.
15	Any surface with adequate handholds and footholds (natural or artificial), such as a very rough natural rock surface or a tree. An unknotted rope.
20	An uneven surface with some narrow handholds and footholds, such as a typical wall in a dungeon or ruins.
25	A rough surface, such as a natural rock wall or a brick wall.
25	Overhang or ceiling with handholds but no footholds.
-	A perfectly smooth, flat, vertical surface cannot be climbed.
-10*	Climbing a chimney (artificial or natural) or other location where one can brace against two opposite walls.
-5*	Climbing a corner where the character can brace against perpendicular.
+5*	Surface is slippery.

* These modifiers are cumulative; use any that apply.

Since the character can't move to avoid a blow while climbing, enemies can attack the character as if the character were stunned: An attacker gets a +2 bonus, and the character loses any Dexterity bonus to Armor Class.

The character cannot use a shield while climbing.

Any time the character takes damage while climbing, make a Climb check against the DC of the slope or wall. Failure means the character falls from the character's current height and sustains the appropriate falling damage.

Accelerated Climbing: The character tries to climb more quickly than normal. As a miscellaneous full-round action, the character can attempt to cover the character's full speed in climbing distance, but the character suffers a -5 penalty on Climb checks and the character must make two checks each round. Each successful check allows the character to climb a distance equal to one-half the character's speed. By accepting the -5 penalty, the character can move this far as a move-equivalent action rather than as a full-round action.

Making the character's Own Handholds and Footholds: The character can make his or her own handholds and footholds by pounding pitons into a wall. Doing so takes 1 minute per piton, and one piton is needed per 3 feet. As with any surface with handholds and footholds, a wall with pitons in it has a DC of 15. In the same way, a climber with a handaxe or similar implement can cut holds in an ice wall.

Catching the One's Self When Falling: It's practically impossible to catch the one's self on a wall while falling. Make a Climb check (DC = wall's DC + 20) to do so. A slope is a lot easier to catch the one's self on (DC = slope's DC + 10).

Special: A character with 5 or more ranks in Use Rope gets a +2 synergy bonus on checks to climb a rope, a knotted rope, or a rope and wall combination.

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Concentration (CON)

Check: The character can use this skill to maintain concentration in the face of other distractions.

The table below summarizes various types of distractions that cause the character to make a Concentration check while casting a spell. "Spell level" refers to the level of the spell the character is trying to cast.

DC	Distraction
10 + damage dealt + spell level	Injury or failed saving throw during thecasting of a spell (for spells with a casting time of 1 full round or more) or injury by an attack of opportunity or readied attack made in response to the spell being cast (for spells with a casting time of 1 action).
10 + half of continous damage + spell level	Suffering automatic continuous damage
10 + damage dealt + spell level	Damaged by spell.
Distracting spell's save DC + spell level	Distracted by nondamaging spell. (If the spell allows no save, use the save DC it would have if it did allow a save.)
20 + spell level	Grappling or pinned. (Can only cast spells without somatic components and whose material component is in hand.)
10 + spell level	Vigorous motion (on a moving mount, bouncy wagon ride, small boat in rough water, belowdecks in a storm-tossed

	ship).
15 + spell level	Violent motion (galloping horse, very rough wagon ride, small boat in rapids, on deck of storm-tossed ship).
20 + spell level	Affected by earthquake spell.
5 + spell level	Weather is a high wind carrying blinding rain or sleet.
Distracting spell's save DC + spell level	Weather caused by spell, such as storm of vengeance (same as distracted by nondamaging spell).
15 + spell level	Casting defensively (so as not to provoke attacks of opportunity).
15	Caster entangled.

Special: A character with the Combat Casting feat gets a +4 bonus to Concentration checks made to cast a spell while on the defensive.

Retry: Yes, though a success doesn't cancel the effects of a previous failure.

Craft (INT)

Craft is actually a number of separate skills. For instance, the character could have the skill Craft (trapmaking). The character's ranks in that skill don't affect any checks the character happens to make for pottery or leatherworking, for example. The character could have several Craft skills, each with its own ranks, each purchased as a separate skill.

A Craft skill is specifically focused on creating something; if it is not, it is a Profession.

Check: The character can practice a trade and make a decent living, earning about half the check result in gold pieces per week of dedicated work. The character knows how to use the tools of the trade, how to perform the craft's daily tasks, how to supervise untrained helpers, and how to handle common problems. (Untrained laborers and assistants earn an average of 1 silver piece per day.)

However, the basic function of the Craft skill is to allow the character to make an item of the appropriate type. The DC depends on the difficulty of the item created. The DC, the character's check results, and the price of the item determine how long it takes to make the item. The item's finished price also determines the cost of raw materials. (In the game world, it is the skill level required, the time required, and the raw materials required that determine an item's price. That's why the item's price and DC determine how long it takes to make the item and the cost of the raw materials.)

All crafts require artisan's tools to give the best chance of success; if improvised tools are used instead, the check is made with a -2 circumstance penalty. On the other hand, masterwork artisan's tools provide a +2circumstance bonus.

To determine how much time and money it takes to make an item:

1. Find the DC listed here or have the DM set one.

2. Pay one-third the item's price in raw materials.
3. Make a skill check representing one week's work.

If the check succeeds, multiply the check result by the DC. If the result times the DC equals the price of the item multiplied by 10, then the character has completed the item. (If the result times the DC equals double or triple the price of the item (multiplied by 10), then the character has completed the task in one-half or one-third the time, and so on.) If the result times the DC doesn't equal the price multiplied by 10, then it represents progress the character has made this week. Record the result and make a check for the next week. Each week the character makes more progress until the character's total reaches the price of the item multiplied by 10.

If the character fails the check, the character makes no progress this week. If the character fails by 5 or more, the character ruins half the raw materials and have to pay half the original raw material cost again.

Progress by the Day: The character can make checks by the day instead of by the week, in which case the character's progress (result times DC) is at one tenth the weekly rate.

Creating Masterwork Items: The character can make a masterwork item (an item that conveys a bonus to its use through its exceptional craftsmanship, not through being magical).

To create a masterwork version of an item on the table below, the character creates the masterwork component as if it were a separate item in addition to the standard item.

Item	Craft	DC
Armor, shield	Armorsmith	10 + AC bonus
Longbow, shortbow	Bowmaking	12
Composite longbow, composite shortbow	Bowmaking	15
Mighty bow	Bowmaking	15 +2/Str bonus
Crossbow	Weaponsmith	15
Simple melee or thrown weapon	Weaponsmith	12
Martial melee or thrown weapon	Weaponsmith	15
Exotic melee or thrown weapon	Weaponsmith	18
Very simple item	Varies	5
Typical item	Varies	10
High-quality item	Varies	15
Complex or superior item	Varies	20

The masterwork component has its own price and DC. Once both the standard component and the masterwork component are completed, the masterwork item is finished. (Note: The price the character pays for the masterwork component is one-third of the given amount, just as it is for the price in raw materials.)

Repairing Items: Generally, the character can repair an item at the same DC that it takes to make it in the first place. The cost of repairing an item is one-fifth the item's price.

In some cases, the “fabricate” spell can be used to achieve the results of a Craft check without the character’s needing to make the check. However, the character must make an appropriate Craft check when using the spell to make articles requiring a high degree of craftsmanship (jewelry, swords, glass, crystal, etc.).

A Craft check related to woodworking in conjunction with the casting of the “ironwood” spell enables the character to make wooden items that have the strength of steel.

When casting the spell “minor creation”, the character must succeed at an appropriate Craft check to make a complex item, such as a Craft (bowmaking) check to make straight arrow shafts.

Retry: Yes, but each time the character misses by 5 or more, the character ruins half the raw materials and have to pay half the original raw material cost again.

Decipher Script (INT)

TRAINED ONLY; BARDS & ROGUES ONLY

Check: The character can decipher writing in an unfamiliar language or a message written in an incomplete or archaic form. The base DC is 20 for the simplest messages, 25 for standard texts, and 30 or higher for intricate, exotic, or very old writing.

If the check succeeds, the character understands the general content of a piece of writing, reading about one single page of text (or its equivalent) in 1 minute. If the check fails, the DM makes a Wisdom check (DC 5) for the character to see if he or she avoids drawing a false conclusion about the text. (Success means that the character does not draw a false conclusion; failure means that the character does.)

The DM secretly makes both the skill check and (if necessary) the Wisdom check so the character can’t tell whether the conclusion the character draws is true or false.

Retry: No.

Special: If the character has 5 or more ranks in Decipher Script, the character gets a +2 synergy bonus on Use Magic Device checks related to scrolls.

Diplomacy (CHA)

Check: The character can change others’ attitudes with a successful check. In negotiations, participants roll opposed Diplomacy checks to see who gains the advantage. Opposed checks also resolve cases when two advocates or diplomats plead opposite cases in a hearing before a third party.

Retry: Generally, retries do not work. Even if the initial check succeeds, the other character can only be persuaded so far, and a retry may do more harm than good. If the initial check fails, the other character has probably become more firmly committed to his position, and a retry is futile.

Special: Charisma checks to influence NPCs are generally untrained Diplomacy checks.

If the character has 5 or more ranks in Bluff or Sense Motive, the character gets a +2 synergy bonus on Diplomacy checks. These bonuses stack.

Disable Device (INT)

TRAINED ONLY

The effort requires at least a simple tool of the appropriate sort (a pick, pry bar, saw, file, etc.). Attempting a Disable Device check without a set of thieves' tools carries a -2 circumstance penalty, even if a simple tool is employed. The use of masterwork thieves' tools enables the character to make the check with a +2 circumstance bonus.

Check: The DM makes the Disable Device check so that the character doesn't necessarily know whether the character has succeeded. The amount of time needed to make a check and the DC for the check depend on how tricky the device is. Disabling a simple device takes 1 round (and is at least a full-round action). Intricate or complex devices require 2d4 rounds. The character also can rig simple devices such as saddles or wagon wheels to work normally for a while and then fail or fall off some time later (usually after 1d4 rounds or minutes of use).

Disabling (or rigging or jamming) a fairly simple device has a DC of 10. More intricate and complex devices have a higher DC. The DM rolls the check. If the check succeeds, the character disables the device. If the check fails by up to 4, the character has failed but can try again. If the character fails by 5 or more, something goes wrong. If it's a trap, the character springs it. If it's some sort of sabotage, the character thinks the device is disabled, but it still works normally.

Device	Time	DC*	Example
Simple	1 round	10	Jam a lock
Tricky	1d4 rounds	15	Sabotage a wagon wheel
Difficult	2d4 rounds	20	Disarm a trap, reset a trap
Wicked	2d4 rounds	25	Disarm a complex trap, cleverly sabotage a clockwork device

* If the character attempts to leave behind no trace of the tampering, add 5 to the DC.

Retry: Yes, though the character must be aware that the character has failed in order to try again.

A rogue who beats a trap's DC by 10 or more can generally study a trap, figure out how it works, and bypass it (along with his companions) without disarming it.

Special: Rogues (and only rogues) can disarm magic traps. A magic trap generally has a DC of 25 + the level of the magic used to create it.

Disguise (CHA)

The effort requires at least a few props, some makeup, and 1d3 X 10 minutes of work.

The use of a disguise kit provides a +2 circumstance bonus to a Disguise check. A disguise can include an apparent change of height or weight of no more than one-tenth the original.

The character can also impersonate people, either individuals or types, so that, for example, the character might, with little or no actual disguise, make the character seem like a traveler even if the character is a local.

Check: The character's Disguise check result determines how good the disguise is, and it is opposed by others' Spot check results. Make one Disguise check even if several people make Spot checks. The DM makes the character's Disguise check secretly so that the character is not sure how good it is.

If the character doesn't draw any attention to him or herself, however, others do not get to make Spot checks. If the character comes to the attention of people who are suspicious (such as a guard who is watching commoners walking through a city gate), the DM can assume that such observers are taking 10 on their Spot checks.

The effectiveness of the character's disguise depends in part on how much the character is attempting to change his or her appearance:

Disguise	Modifier
Minor details only	+5
Disguised as different sex	-2
Disguised as different race	-2
Disguised as different age category	-2*
Disguised as specific class	-2

* Per step of difference between character's actual age category and disguised age category (young [younger than adulthood], adulthood, middle age, old, venerable).

If the character is impersonating a particular individual, those who know what that person looks like get a bonus on their Spot checks (and are automatically considered to be suspicious of the character, so opposed checks are always invoked).

Familiarity	Bonus
Recognizes on sight	+4
Friends or associates	+6
Close friends	+8
Intimate	+10

Usually, an individual makes a check for detection immediately upon meeting the character and each hour thereafter. If the character casually meet many different creatures, each for a short time, check once per day or hour, using an average Spot bonus for the group. For example, if a character is trying to pass for a merchant at a bazaar, the DM can make one Spot check per hour for the people she encounters using a +1 bonus on the check to represent the average of the crowd (most people with no Spot ranks and a few with good Spot skills).

Retry: A character may try to redo a failed disguise, but once others know that a disguise was attempted they'll be more suspicious.

Special: If the character has 5 or more ranks of Bluff, the character gets a +2 synergy bonus on Disguise checks when the character knows that the character is being observed and the character tries to act in character.

Escape Artist (DEX)

ARMOR CHECK PENALTY

Check: Making a check to escape from being bound up by ropes, manacles, or other restraints (except a grappler) requires 1 minute of work. Escaping a net or entangle spell is a full-round action. Squeezing through a tight space takes at least 1 minute, maybe longer, depending on how long the space is.

Restraint	DC
Ropes	Binder's Use Rope check at +10
Net	20
Manacles	30
Tight space	30
Masterwork manacles	35
Grappler	Grappler's grapple check
Spell: Animate rope, command plants, control plants, or entangle	20
Spell: Snare	23

Ropes: The character's Escape Artist check is opposed by the binder's Use Rope check. Since it's easier to tie someone up than to escape from being tied up, the binder gets a special +10 bonus on her check.

Manacles and Masterwork Manacles: Manacles have a DC set by their construction.

Net: Escaping from a net is a full-round action.

Tight Space: This is the DC for getting through a space where one's head fits but one's shoulders don't. If the space is long, such as in a chimney, the DM may call for multiple checks. The character can't fit through a space that the character's head does not fit through.

Grappler: The character can make an Escape Artist check opposed by the enemy's grapple check to get out of a grapple or out of a pinned condition (so that the character is just being grappled). Doing so is a standard action, so if the character escapes the grapple the character can move in the same round. See "Wriggle Free" under Other Grappling Options.

Spell: Escaping from an animate rope, command plants, control plants, or entangle spell is a full-round action.

Retry: The character can make another check after a failed check if the character is

squeezing through a tight space, making multiple checks. If the situation permits, the character can make additional checks or even take 20 as long as the character is not being actively opposed.

Special: A character with 5 or more ranks of Use Rope gets a +2 synergy bonus on Escape Artist checks when escaping from rope bonds.

Forgery (INT)

Check: Forgery requires writing materials appropriate to the document being forged, enough light to write by, wax for seals (if appropriate), and some time. Forging a very short and simple document takes about 1 minute. Longer or more complex documents take 1d4 minutes per page. To forge a document on which the handwriting is not specific to a person (military orders, a government decree, a business ledger, or the like), the character needs only to have seen a similar document before and gains a +8 bonus on the roll. To forge a signature, an autograph of that person to copy is needed, and the character gains a +4 bonus on the roll. To forge a longer document written in the hand of some particular person, a large sample of that person's handwriting is needed.

The DM makes the check secretly so the character is not sure how good the forgery is. As with Disguise, the character doesn't need to make a check until someone examines the work. This Forgery check is opposed by the person who examines the document to check its authenticity. That person makes a Forgery check opposed to the forger's. The reader gains bonuses or penalties to his or her check as described in the table below.

Condition	Reader's Check Modifier
Type of document unknown to reader	-2
Type of document somewhat known to reader	+0
Type of document well known to reader	+2
Handwriting not known to reader	-2
Handwriting somewhat known to reader	+0
Handwriting intimately known to reader	+2
Reader only casually reviews the document	-2

As with Bluff, a document that contradicts procedure, orders, or previous knowledge or one that requires sacrifice on the part of the person checking the document can increase that character's suspicion (and thus create favorable circumstances for the checker's opposing Forgery check).

Retry: Usually, no. A retry is never possible after a particular reader detects a particular forgery. But the document created by the forger might still fool someone else. The result of a Forgery check for a particular document must be used for every instance of a different reader examining the document. No reader can attempt to detect a particular forgery more than once; if that one opposed check goes in favor of the forger, then the reader can't try using his own skill again, even if he's suspicious about the document.

Special: To forge documents and detect forgeries, one must be able to read and write the language in question. (The skill is language-dependent.) Barbarians can't learn the Forgery skill unless they have learned to read and write.

Gather Information (CHA)

Check: By succeeding at a skill check (DC 10), given an evening with a few gold pieces to use for making friends by buying drinks and such, the character can get a general idea of what the major news items are in a city, assuming no obvious reasons exist why the information would be withheld. The higher the check result, the better the information.

If the character wants to find out about a specific rumor, specific item, obtain a map, or do something else along those lines, the DC is 15 to 25 or higher.

Retry: Yes, but it takes an evening or so for each check, and characters may draw attention to themselves if they repeatedly pursue a certain type of information.

Handle Animal (CHA)

TRAINED ONLY

Check: The time required to get an effect and the DC depend on what the character is trying to do.

Task	Time	DC
Handle a domestic animal	Varies	10
"Push" a domestic animal	Varies	15
Teach an animal tasks	2 months	15
Teach an animal unusual tasks	2 months	20
Rear a wild animal	1 year	15 + HD of animal
Rear a beast	1 year	20 + HD of beast
Train a wild animal	2 months	20 + HD of animal
Train a beast	2 months	25 + HD of beast

Time: For a task with a specific time frame, the character must spend half this time (at the rate of 3 hours per day per animal being handled) working toward completion of the task before the character makes the skill check. If the check fails, the character can't teach, rear, or train that animal. If the check succeeds, the character must invest the remainder of the time before the teaching, rearing, or training is complete. If the time is interrupted or the task is not followed through to completion, any further attempts to teach, rear, or train the same animal automatically fail.

Handle a Domestic Animal: This means to command a trained dog, to drive beasts of labor, to tend to tired horses, and so forth.

"Push" a Domestic Animal: To push a domestic animal means to get more out of it than it usually gives, such as commanding a poorly trained dog or driving draft animals

for extra effort.

Teach an Animal Tasks: This means to teach a domestic animal some tricks. The character can train one type of animal per rank (chosen when the ranks are purchased) to obey commands and perform simple tricks. The character can work with up to three animals at one time, and the character can teach them general tasks. An animal can be trained for one general purpose only.

Teach an Animal Unusual Tasks: This is similar to teaching an animal tasks, except that the tasks can be something unusual for that breed of animal, such as training a dog to be a riding animal. Alternatively, the character can use this aspect of Handle Animal to train an animal to perform specialized tricks, such as teaching a horse to rear on command or come when whistled for or teaching a falcon to pluck objects from someone's grasp.

Rear a Wild Animal or a Beast: To rear an animal or beast means to raise a wild creature from infancy so that it is domesticated. A handler can rear up to three creatures of the same type at once. A successfully domesticated animal or beast can be taught tricks at the same time that it's being raised, or can be taught as a domesticated animal later.

Train a Wild Animal and Train a Beast: To train a wild creature to do certain tricks, but only at the character's command. The creature is still wild, though usually controllable.

Retry: For handling and pushing domestic animals, yes. For training and rearing, no.

Special: A character with 5 or more ranks of Animal Empathy gets a +2 synergy bonus on Handle Animal checks with animals. A character must have 9 or more ranks of Animal Empathy to get the same +2 synergy bonus on Handle Animal checks with beasts.

A character with 5 or more ranks of Handle Animal gets a +2 synergy bonus on Ride checks.

An untrained character can use a Charisma check to handle and push animals.

Heal (WIS)

Check: The DC and effect depend on the task the character attempts.

Task	DC
First aid	15
Long-term care	15
Treat caltrop wound	15
Treat poison	Poison's DC
Treat disease	Disease's DC

First Aid: First aid usually means saving a dying character. If a character has negative hit points and is losing hit points (at 1 per round, 1 per hour, or 1 per day), the healing character can make her stable. The injured character regains no hit points, but

she does stop losing them. The check is a standard action.

Long-term Care: Providing long-term care means treating a wounded person for a day or more. If successful, the character lets the patient recover hit points or ability score points (lost to temporary damage) at twice the normal rate: 2 hit points per level for each day of light activity, 3 hit points per level for each day of complete rest, and 2 ability score points per day. The character can tend up to six patients at a time. The character needs a few items and supplies (bandages, salves, and so on) that are easy to come by in settled lands.

Giving long-term care counts as light activity for the healer. The character cannot give long-term care to him or herself.

A healer's kit gives a +2 circumstance bonus to Heal checks.

Treat Wound that Reduces Base Speed: A creature that has its speed reduced can be treated by the Heal skill. A successful Heal check removes this movement penalty. Treating such a wound is a standard action.

Treat Poison: To treat poison means to tend a single character who has been poisoned and who is going to take more damage from the poison (or suffer some other effect).

Every time the poisoned character makes a saving throw against the poison, the character makes a Heal check. The poisoned character uses the character's result in place of her saving throw if the character's Heal result is higher.

Treat Disease: To treat a disease means to tend a diseased character. Every time the diseased character makes a saving throw against disease effects, the character makes a Heal check. The diseased character uses the character's result in place of his or her saving throw if the character's Heal result is higher.

A creature wounded by a spike growth or spike stones spell must succeed at a Reflex save or take injuries that slow his speed by one-third. Another character can remove this penalty by taking 10 minutes to dress the victim's injuries and succeeding at a Heal check against the spell's save DC.

Special: If the character has 5 or more ranks in Profession (herbalist), the character gets a +2 synergy bonus on Heal checks.

Hide (DEX)

ARMOR CHECK PENALTY

Check: The character's Hide check is opposed by the Spot check of anyone who might see the character. The character can move up to one-half normal speed and hide at no penalty. At more than one-half and up to the full speed, the character suffers a -5 penalty. It's practically impossible (-20 penalty) to hide while running or charging.

Larger and smaller creatures get size bonuses and size penalties on Hide checks: Fine +16, Diminutive +12, Tiny +8, Small +4, Large -4, Huge -8, Gargantuan -12, Colossal -16.

If people are observing the character, even casually, the character can't hide. The character can run around a corner or something so that the character is out of sight and then hide, but the others then know at least where the character went. If the character's observers are momentarily distracted (as by a Bluff check; see below), though, the character can attempt to hide. While the others turn their attention from the character, the character can attempt a Hide check if the character can get to a hiding place of some kind. (As a general guideline, the hiding place has to be within 1 foot per rank the character has in Hide.) This check, however, is at -10 because the character has to move fast.

Creating a Diversion to Hide: The character can use Bluff to help the character hide. A successful Bluff check can give the character the momentary diversion the character needs to attempt a Hide check while people are aware of the character.

Innuendo (WIS)

TRAINED ONLY

Check: The character can get a message across to another character with the Innuendo skill.

The DC for a basic message is 10. The DC is 15 or 20 for complex messages, especially those that rely on getting across new information. Also, the character can try to discern the hidden message in a conversation between two other characters who are using this skill. The DC is the skill check of the character using Innuendo, and for each piece of information that the eavesdropper is missing, that character suffers a -2 penalty on the check. For example, if a character eavesdrops on people planning to assassinate a visiting diplomat, the eavesdropper suffers a -2 penalty if he doesn't know about the diplomat. Whether trying to send or intercept a message, a failure by 5 or more points means that some false information has been implied or inferred.

The DM makes the character's Innuendo check secretly so that the character doesn't necessarily know whether the character was successful.

Retry: Generally, retries are allowed when trying to send a message, but not when receiving or intercepting one. Each retry carries the chance of miscommunication.

Special: If the character has 5 or more ranks in Bluff, the character gets a +2 synergy bonus on the check to transmit (but not receive) a message. If the character has 5 or more ranks in Sense Motive, the character gets a +2 synergy bonus on the check to receive or intercept (but not transmit) a message.

Intimidate (CHA)

Check: The character can change others' behavior with a successful check. The DC is typically 10 + the target's Hit Dice. Any bonuses that a target may have on saving throws against fear increase the DC.

Retry: Generally, retries do not work. Even if the initial check succeeds, the other character can only be intimidated so far, and a retry doesn't help. If the initial check fails, the other character has probably become more firmly resolved to resist the intimidator, and a retry is futile.

Special: If the character has 5 or more ranks in Bluff, the character gets a +2 synergy bonus on Intimidate checks.

Intuit Direction (WIS)

TRAINED ONLY

Check: By concentrating for 1 minute, the character can determine where true north lies in relation to the character (DC 15). If the check fails, the character cannot determine direction. On a natural roll of 1, the character errs and mistakenly identify a random direction as true north.

The DM makes the character's check secretly so that the character doesn't know whether the character rolled a successful result or a 1.

Retry: The character can use Intuit Direction more than once per day. The roll represents how sensitive to direction the character is at that point in the day. Use the most recently rolled number for all other checks in the same day.

Special: Untrained characters can't use an innate sense of direction, but they could determine direction by finding clues.

Jump (STR)

ARMOR CHECK PENALTY

Check: The character jumps a minimum distance plus an additional distance depending on the amount by which the character's Jump check result exceeds 10. The maximum distance of any jump is a function of the character's height.

Type of Jump	Minimum Distance	Additional Distance	Maximum Distance
Running jump*	5 ft.	+1 ft./1 point above 10	Height X 6
Standing jump	3 ft.	+1 ft./2 points above 10	Height X 2
Running	2 ft.	+1 ft./4 points above 10	Height X 1 1/2
High Jump* - Standing	2 ft.	+1 ft./8 points above 10	Height
High Jump - Jump back	1 ft.	+1 ft./8 points above 10	Height

* The character must move 20 feet before jumping. A character can't

take a running jump in heavy armor.

The distances listed are for characters with speeds of 30 feet. If the character has a lower speed (from armor, encumbrance, or weight carried, for instance), reduce the distance jumped proportionally. If the character has a higher speed (because the character is a barbarian or an experienced monk, for instance), increase the distance jumped proportionally.

Distance moved by jumping is counted against maximum movement in a round normally.

If the character intentionally jumps down from a height, the character might take less damage than if the character just fell. If the character succeeds at a Jump check (DC 15), the character takes damage as if the character had fallen 10 feet less than the character actually did.

Special: If the character has 5 or more ranks in Tumble, the character gets a +2 synergy bonus on Jump checks.

A character who has the Run feat and who makes a running jump increases the distance or height he clears by one-fourth, but not past the maximum.

Knowledge (INT)

TRAINED ONLY

Check: Answering a question within the character's field of study has a DC of 10 (for really easy questions), 15 (for basic questions), or 20 to 30 (for really tough questions).

Retry: No. The check represents what the character knows, and thinking about a topic a second time doesn't let the character know something the character never learned in the first place.

Special: An untrained Knowledge check is simply an Intelligence check. Without actual training, a character only knows common knowledge.

Listen (WIS)

Check: Make a Listen check against a DC that reflects how quiet the noise is that the character might hear or against an opposed Move Silently check.

The DM may make the Listen check so that the character doesn't know whether not hearing anything means that nothing is there, or that the character rolled low.

DC	Sound
0	People talking
5	A person in medium armor walking at a slow pace (10 ft./round) trying not to make noise.
10	An unarmored person walking at a slow pace (15 ft./round) trying not to make any noise
15	A 1st-level rogue using Move Silently within 10 ft. of the listener

19	A cat stalking
30	An owl gliding in for a kill
+1	Per 10 ft. from the listener
+5	Through a door
+15	Through a stone wall

In the case of people trying to be quiet, the listed DCs could be replaced by Move Silently checks, in which case the listed DC would be the average result (or close to it).

Retry: The character can make a Listen check every time the character has a chance to hear something in a reactive manner. As a full-round action, the character may try to hear something the character failed to hear previously.

Special: When several characters are listening to the same thing, the DM can make a single 1d20 roll and use it for all the listeners' skill checks.

Move Silently (DEX)

ARMOR CHECK PENALTY

Check: The character's Move Silently check is opposed by the Listen check of anyone who might hear the character. The character can move up to one-half the character's normal speed at no penalty. At more than one-half and up to the character's full speed, the character suffers a -5 penalty. It's practically impossible (-20 penalty) to move silently while running or charging.

Open Lock (DEX)

TRAINED ONLY

The effort requires at least a simple tool of the appropriate sort (a pick, pry bar, blank key, wire, etc.). Attempting an Open Lock check without a set of thieves' tools carries a -2 circumstance penalty, even if a simple tool is employed. The use of masterwork thieves' tools enables the character to make the check with a +2 circumstance bonus.

Check: Opening a lock entails 1 round of work and a successful check. (It is a full-round action.)

Lock	DC
Very simple lock	20
Average lock	25
Good lock	30
Amazing lock	40

Perform (CHA)

Possible Perform types include ballad, buffoonery, chant, comedy, dance, drama, drums, epic, flute, harp, juggling, limericks, lute, mandolin, melody, mime, ode, pan pipes, recorder, shalm, storytelling, and trumpet. The character is capable of one form of performance per rank.

Check: The character can impress audiences with talent and skill.

DC	Performance
10	Routine performance. Trying to earn money by playing in public is essentially begging. The character earns 1d10 cp/day.
15	Enjoyable performance. In a prosperous city, the character can earn 1d10 sp/day.
20	Great performance. In a prosperous city, the character can earn 3d10 sp/day. With time, the character may be invited to join a professional troupe and may develop a regional reputation.
25	Memorable performance. In a prosperous city, the character can earn 1d6 gp/day. With time, the character may come to the attention of noble patrons and develop a national reputation.
30	Extraordinary performance. In a prosperous city, the character can earn 3d6 gp/day. With time, the character may draw attention from distant potential patrons or even from extraplanar beings.

A masterwork musical instrument gives a +2 circumstance bonus to Perform checks that involve the use of the instrument.

Retry: Retries are allowed, but they don't negate previous failures, and an audience that has been unimpressed in the past is going to be prejudiced against future performances. (Increase the DC by 2 for each previous failure.)

In addition to using the Perform skill, a character could entertain people with tumbling, tightrope walking, and spells (especially illusions)

Pick Pocket (DEX)

TRAINED ONLY; ARMOR CHECK PENALTY

Check: A check against DC 10 lets the character palm a coin-sized, unattended object. Minor feats of legerdemain, such as making a coin disappear, are also DC 10 unless an observer is determined to note where the item went.

When performing this skill under close observation, the character's skill check is opposed by the observer's Spot check. The observer's check doesn't prevent the character from performing the action, just from doing it unnoticed.

If the character tries to take something from another creature, the character must make a skill check against DC 20. The opponent makes a Spot check to detect the attempt. The opponent detects the attempt if her check result beats the character's check result, regardless of whether the character got the item.

DC	Task
10	Palm a coin-sized object, make a coin disappear
20	Lift a small object from a person

Retry: A second Pick Pocket attempt against the same target, or when being watched by the same observer, has a DC +10 higher than the first skill check if the first check failed or if the attempt was noticed.

Special: If the character has 5 or more ranks in Bluff, the character gets a +2 synergy bonus on Pick Pocket checks.

Profession (WIS)

TRAINED ONLY

The character is trained in a livelihood or a professional role, such as apothecary, boater, bookkeeper, brewer, cook, driver, farmer, fisher, guide, herbalist, herdsman, innkeeper, lumberjack, miller, miner, porter, rancher, sailor, scribe, siege engineer, stablehand, tanner, teamster, woodcutter, and so forth.

Like Craft, Profession is actually a number of separate skills. The character could have several Profession skills, each with its own ranks, each purchased as a separate skill.

While a Craft skill represents skill in creating or making an item, a Profession skill represents an aptitude in a vocation requiring a broader range of less specific knowledge. To draw a modern analogy, if an occupation is a service industry, it's probably a Profession skill. If it's in the manufacturing sector, it's probably a Craft skill.

Check: The character can practice a trade and make a decent living, earning about half the check result in gold pieces per week of dedicated work. The character knows how to use the tools of the trade, how to perform the profession's daily tasks, how to supervise untrained helpers, and how to handle common problems. For example, a sailor knows how to tie several basic knots, how to tend and repair sails, and how to stand a deck watch at sea. The DM sets DCs for specialized tasks.

Retry: An attempt to use a Profession skill to earn an income cannot be retried. The character is stuck with whatever weekly wage the check result brought the character. (Another check may be made after a week to determine a new income for the next period of time.) An attempt to accomplish some specific task can usually be retried.

Special: Untrained laborers and assistants earn an average of 1 silver piece per day.

Read Lips (INT)

TRAINED ONLY; ROGUE ONLY

Check: The character must be within 30 feet of the speaker and be able to see her speak. The character must be able to understand the speaker's language. (Use of this skill is language-dependent.) The base DC is 15, and it is higher for complex speech or an inarticulate speaker. The character has to concentrate on reading lips for a full minute before making the skill check, and the character can't perform some other action during this minute. The character can move at half speed but not any faster, and the character must maintain a line of sight to the lips being read. If the check succeeds, the character can understand the general content of a minute's worth of speaking, but the character usually still misses certain details.

If the check fails, the character can't read the speaker's lips. If the check fails by 5 or more, the character draws some incorrect conclusion about the speech.

The DM rolls the character's check so the character don't know whether the character succeeded or missed by 5.

Retry: The skill can be used once per minute.

Ride (DEX)

When the character selects this skill, choose the type of mount the character is familiar with. For this purpose, "horses" includes mules, donkeys, and ponies. If the character uses the skill with a different mount (such as riding a giant lizard when the character is used to riding horses), the character's rank is reduced by 2 (but not below 0). If the character uses this skill with a very different mount (such as riding a griffon when the character is used to riding horses), the character's rank is reduced by 5 (but not below 0).

Check: Typical riding actions don't require checks. The character can saddle, mount, ride, and dismount from a mount without a problem. Mounting or dismounting is a move-equivalent action. Some tasks require checks:

Riding Task	DC
Guide with knees	5
Stay in saddle	5
Fight with warhorse	10
Leap	15
Control mount in battle	20
Fast mount or dismount	20*
Cover	15
Soft fall	15

* Armor check penalty applies.

Guide with Knees: the character can react instantly to guide the character's mount with the character's knees so that the character can use both hands in combat. Make the check at the start of the character's round. If the character fails, the character can only use one hand this round because the character needs to use the other to control the character's mount.

Stay in Saddle: The character can react instantly to try to avoid falling when the character's mount rears or bolts unexpectedly or when the character takes damage.

Fight with Warhorse: If the character directs a war-trained mount to attack in battle, the character can still make the character's own attack or attacks normally.

Cover: The character can react instantly to drop down and hang alongside the mount, using it as one-half cover. The character can't attack or cast spells while using the character's mount as cover. If the character fails, the character doesn't get the cover benefit.

Soft Fall: The character reacts instantly to try to take no damage when the character falls off a mount, such as when it is killed or when it falls. If the character fails, the character takes 1d6 points of falling damage.

Leap: The character can get a mount to leap obstacles as part of its movement. Use the character's Ride skill modifier or the mount's Jump skill modifier (whichever is lower) to see how far the mount can jump. The DC (15) is what the character needs to roll to stay on the mount when it leaps.

Control Mount in Battle: As a move-equivalent action, the character can attempt to control a light horse, pony, or heavy horse while in combat. If the character fails, the character can do nothing else that round. The character does not need to roll for warhorses or warponies.

Fast Mount or Dismount: The character can mount or dismount as a free action. If the character fails the check, mounting or dismounting is a move-equivalent action. (The character can't attempt a fast mount or dismount unless the character can perform the mount or dismount as a move-equivalent action this round.)

Special: If the character is riding bareback, the character suffers a -5 penalty on Ride checks.

If the character has 5 or more ranks in Handle Animal, the character gets a +2 synergy bonus to Ride checks.

If the character's mount has a military saddle, it gives a +2 circumstance bonus to Ride checks related to staying in the saddle.

Scry (INT)

BARD, CLERIC, DRUID, SORCERER, WIZARD ONLY

Check: The character can't use this skill without some magical means to scry. Use of this skill is described in association with those spells and items. These items allow the character to spy on others, and this skill just lets the character do it better. This skill also improves the character's chance to notice when the character is being scried, as detailed in the descriptions of the arcane eye and detect scrying spells.

Special: Although this skill is exclusive to certain classes, it can be used untrained. This means that a character with no ranks in Scry, and who is not allowed to buy ranks in this skill, can still make an Intelligence check to notice when he is being scried.

Search (INT)

Check: The character generally must be within 10 feet of the object or surface to be searched. It takes 1 round to search a 5-foot-by-5-foot area or a volume of goods 5 feet on a side; doing so is a full-round action.

Task	DC
Ransack a chest full of junk to find a certain item	10

Notice a typical secret door or a simple trap	20
Find a difficult nonmagical trap not of stone (rogue only)*	21+
Find a magic trap (rogue only)*	25+ spell level used to create
Notice a well-hidden secret door	30

* Dwarves who are not rogues can use Search to do this if the trap is built into or out of stone.

Active Abjuration spells within 10 feet of each other for 24 hours or more create barely visible energy fluctuations. These fluctuations give characters a +4 bonus to Search checks to locate such Abjuration spells.

While anyone can use Search to find a trap whose DC is 20 or less, only a rogue can use Search to locate traps with higher DCs. Finding a nonmagical trap has a DC of at least 20, and the DC is higher if it is well hidden. Finding a magic trap has a DC of 25 plus the level of the spell used to create it. Identifying the location of a snare spell has a DC of 23.

Special: A character who does not have the Track feat can use the Search skill to find tracks, but can only follow tracks if the DC is 10 or less.

Sense Motive (WIS)

Check: A successful check allows the character to avoid being bluffed. The character can also use the skill to tell when something is up (something odd is going on that the character were unaware of) or to assess someone's trustworthiness. Trying to gain information with this skill takes at least 1 minute, and the character could spend a whole evening trying to get a sense of the people around the character.

Task	DC
Hunch	20
Sense enchantment	25

Hunch: This use of the skill essentially means making a gut assessment of the social situation. The character can get the feeling from another's behavior that something is wrong, such as when the character is talking to an impostor. Alternatively, the character can get the feeling that someone is trustworthy.

Sense Enchantment: The character can tell that someone's behavior is being influenced by an Enchantment effect (by definition, a mind-affecting effect), such as charm person, even if that person isn't aware of it herself.

Retry: No, though the character may make a Sense Motive check for each bluff made on the character.

Speak Language (NONE)

TRAINED ONLY

The Speak Language skill doesn't work like a standard skill.

- The character starts at 1st level knowing one or two languages (according to the character's race) plus an additional number of languages equal to the character's Intelligence bonus.
- Instead of buying a rank in Speak Language, the character chooses a new language that the character can speak.
- The character doesn't make Speak Language checks. The character either knows a language or the character doesn't.
- A literate character (anyone but a barbarian) can read and write any language she speaks. Each language has an alphabet (though sometimes several spoken languages share a single alphabet).

Common languages and their alphabets are summarized in Table: Languages.

Table: Languages

Language	Alphabet
Abyssal	Infernal
Aquan	Elven
Auran	Draconic
Celestial	Celestial
Common	Common
Draconic	Draconic
Druidic	Druidic
Dwarven	Dwarven
Elven	Elven
Gnome	Dwarven
Goblin	Dwarven
Giant	Dwarven
Gnoll	Common
Halfling	Common
Ignan	Draconic
Infernal	Infernal
Orc	Dwarven
Sylvan	Elven
Terran	Dwarven
Undercommon	Elven

Retry: Not applicable. (There are no Speak Language checks to fail.)

Spellcraft (INT)

TRAINED ONLY

Check: The character can identify spells and magic effects.

DC	Task
13	When using read magic, identify a glyph of warding.
15 + spell level	Identify a spell being cast. (The character must see or hear the spell's verbal or somatic components.) No retry.
15 + spell level	Learn a spell from a spellbook or scroll. (Wizard only.) No retry for that spell until the character gain at least 1 rank in Spellcraft (even if the character find another source to try to learn the spell from).
15 + spell level	Prepare a spell from a borrowed spellbook. (Wizard only.) One try per day.
15 + spell level	When casting detect magic, determine the school of magic involved in the aura

	of a single item or creature the character can see. (If the aura is not a spell effect, the DC is 15 + half caster level.)
19	When using read magic, identify a symbol.
20 + spell level	Identify a spell that's already in place and in effect. (the character must be able to see or detect the effects of the spell.) No retry.
20 + spell level	Identify materials created or shaped by magic, such as noting that an iron wall is the result of a wall of iron spell. No retry.
20 + spell level	Decipher a written spell (such as a scroll) without using read magic. One try per day.
20	Draw a diagram to augment casting dimensional anchor on a summoned creature. Takes 10 minutes. No retry. The DM makes this check.
30 or higher	Understand a strange or unique magical effect, such as the effects of a magic stream. No retry.

Additionally, certain spells allow the character to gain information about magic provided that the character makes a Spellcraft check as detailed in the spell description.

Retry: See above.

If the character has 5 or more ranks of Use Magic Device, the character gets a +2 synergy bonus to Spellcraft checks to decipher spells on scrolls.

Spot (WIS)

Check: The Spot skill is used primarily to detect characters or creatures who are hiding. Typically, Spot is opposed by the Hide check of the creature trying not to be seen. Sometimes a creature isn't intentionally hiding but is still difficult to see, so a successful Spot check is necessary to notice it.

A Spot check result of greater than 20 can generally let the character become aware of an invisible creature near the character (though the character can't actually see it).

Spot is also used to detect someone in disguise.

Condition	Penalty
Per 10 feet of distance	-1
Spotter distracted	-5

Retry: the character can make a Spot check every time the character has the opportunity to notice something in a reactive manner. As a full-round action, the character may attempt to spot something that the character failed to spot previously.

Swim (STR)

Check: A successful Swim check allows the character to swim one-quarter of the character's speed as a move-equivalent action or one-half the character's speed as a full-round action. Roll once per round. If the character fails, the character makes no progress through the water. If the character fails by 5 or more, the character goes underwater and starts to drown.

If the character is underwater (whether drowning or swimming underwater

intentionally), the character suffers a cumulative -1 penalty to the character's Swim check for each consecutive round the character has been underwater.

The DC for the Swim check depends on the water:

Water Conditions	DC
Calm water	10
Rough water	15
Stormy water	20

Each hour that the character swims, make a Swim check against DC 20 or take 1d6 points of subdual damage from fatigue.

Special: Instead of an armor check penalty, the character suffers a penalty of -1 for each 5 pounds of gear the character is carrying or wearing.

Tumble (DEX)

TRAINED ONLY; ARMOR CHECK PENALTY

The character can't use this skill if the character's speed has been reduced by armor, excess equipment, or loot.

Check: The character can land softly when the character falls or tumbles past opponents. The character can also tumble to entertain an audience (as with the Perform skill).

DC	Task
15	Treat a fall as if it were 10 feet shorter when determining damage.
15	Tumble up to 20 feet (as part of normal movement), suffering no attacks of opportunity while doing so. Failure means the character tumbles 20 feet but suffers attacks of opportunity normally.
25	Tumble up to 20 feet (as part of normal movement), suffering no attacks of opportunity while doing so and moving through areas occupied by enemies (over, under, or around them). Failure means the character tumbles 20 feet and can move through enemy-occupied areas but suffers attacks of opportunity normally.

Retry: An audience, once it has judged a tumbler as uninteresting, is not receptive to repeat performances. The character can try to reduce damage from a fall as an instant reaction once per fall. The character can attempt to tumble as part of movement once per round.

Special: A character with 5 or more ranks in Tumble gains a +3 dodge AC bonus when executing the fight defensively standard or full-round action instead of a +2 dodge AC bonus.

A character with 5 or more ranks in Tumble gains a +6 dodge AC bonus when executing the total defense standard action instead of a +4 dodge AC bonus.

If the character has 5 or more ranks in Jump, the character gets a +2 synergy bonus on Tumble checks.

If the character has 5 or more ranks in Tumble, the character gets a +2 synergy bonus on Balance checks.

Use Magic Device (CHA)

TRAINED ONLY; BARD, ROGUE ONLY

Check: The character can use this skill to read a spell or to activate a magic item. This skill lets the character use a magic item as if the character had the spell ability or class features of another class, as if the character were a different race, or as if the character were a different alignment.

Task	DC
Decipher a written spell	25 + Spell Level
Emulate spell ability	20
Emulate class feature	20
Emulate ability score	See Text
Emulate race	25
Emulate alignment	30
Activate blindly	25

When the character is attempting to activate a magic item using this skill, the character does so as a standard action. However, the checks the character makes to determine whether the character is successful at emulating the desired factors to successfully perform the activation are instant. They take no time by themselves and are included in the activate magic item standard action.

The character make emulation checks each time the character activates a device such as a wand. If the character is using the check to emulate an alignment or some other quality in an ongoing manner, the character needs to make the relevant emulation checks once per hour.

The character must consciously choose what to emulate. That is, the character has to know what the character is trying to emulate when the character makes an emulation check.

Decipher a Written Spell: This works just like deciphering a written spell with the Spellcraft skill, except that the DC is 5 points higher.

Emulate Spell Ability: This use of the skill allows the character to use a magic item as if the character had a particular spell on the character's class spell list. To cast a spell from a scroll or use a wand, the character has to have a particular spell on the character's class spell list. By using the skill this way, the character can use such an item as if the character did have the spell on the character's class spell list. The character's effective caster level is the character's result minus 20. (It's okay to have a caster level of 0.) For wands, it doesn't matter what caster level the character is, but it does matter for scrolls. If the character's effective level is lower than the caster level, the character must roll to see if you use the scroll successfully.

This skill does not let the character cast the spell. It only lets the character cast it from a scroll or wand as if the spell were on the character's class list. Note: If the character is casting it from a scroll, the character has to decipher it first.

Emulate Class Feature: Sometimes the character needs to use a class feature to activate a magic item. The character's effective level in the emulated class equals the character's result minus 20.

This skill does not let the character use the class feature of another class. It just lets the character activate magic items as if the character had the class feature.

If the class whose feature the character is emulating has an alignment requirement, the character must meet it, either honestly or by emulating an appropriate alignment as a separate check (see below).

Emulate Ability Score: To cast a spell from a scroll, the character needs a high ability score in the appropriate ability (Intelligence for wizard spells, Wisdom for divine spells, and Charisma for sorcerer or bard spells). The character's effective ability score (appropriate to the class the character is emulating when the character tries to cast the spell from the scroll) is the character's result minus 15. If the character already has a high enough score in the appropriate ability, the character doesn't need to make this check.

Emulate Race: Some magic items work only for certain races, or work better for those of certain races. The character can use such an item as if the character were a race of the character's choice. The character can emulate only one race at a time.

Emulate Alignment: Some magic items have positive or negative effects based on the character's alignment. The character can use these items as if the character was of an alignment of the character's choice.

The character can emulate only one alignment at a time.

Activate Blindly: Some magic items are activated by special words, thoughts, or actions. The character can activate such items as if the character were using the activation word, thought, or action even if the character is not and even if the character doesn't know it. The character does have to use something equivalent. The character has to speak, wave the item around, or otherwise attempt to get it to activate. The character gets a special +2 bonus if the character has activated the item at least once before.

If the character fails by 10 or more, the character suffers a mishap. A mishap means that magical energy gets released but it doesn't do what the character wanted it to do. The DM determines the result of a mishap, as with scroll mishaps. The default mishaps are that the item affects the wrong target or that uncontrolled magical energy gets released, dealing 2d6 points of damage to the character. Note: This mishap is in addition to the chance for a mishap that the character normally runs when the character casts a spell from a scroll and the spell's caster level is higher than the character's level.

Retry: Yes, but if the character ever rolls a natural 1 while attempting to activate an item and the character fails, then the character can't try to activate it again for a day.

Special: The character cannot take 10 with this skill. Magic is too unpredictable for the character to use this skill reliably.

If the character has 5 or more ranks in Spellcraft, the character gets a +2 synergy bonus on Use Magic Device checks related to scrolls. If the character has 5 or more ranks in Decipher Script, the character gets a +2 synergy bonus on Use Magic Device checks related to scrolls. These bonuses stack.

Use Rope (DEX)

Check: Most tasks with a rope are relatively simple.

DC	Task
10	Tie a firm knot
15	Tie a special knot, such as one that slips, slides slowly, or loosens with a tug
15	Tie a rope around oneself one-handed
15	Splice two ropes together (takes 5 minutes)

When the character binds another character with a rope, any Escape Artist check that the bound character makes is opposed by the character's Use Rope check. The character gets a special +10 bonus on the check because it is easier to bind someone than to escape from being tied up.

The character doesn't make the character's Use Rope check until someone tries to escape.

Special: A silk rope gives a +2 circumstance bonus on Use Rope checks. If the character casts an animate rope spell on a rope, the character gets a +2 circumstance bonus to any Use Rope checks the character makes when using the rope. These bonuses stack.

If the character has 5 or more ranks in Escape Artist, the character gets a +2 synergy bonus on checks to bind someone.

Wilderness Lore (WIS)

Check: The character can keep him or herself and others safe and fed in the wild.

DC	Task
10	Get along in the wild. Move up to one-half the character's overland speed while hunting and foraging (no food or water supplies needed). The character can provide food and water for one other person for every 2 points by which the character's check result exceeds 10.
15	Gain +2 on all Fortitude saves against severe weather while moving up to one-half the character's overland speed, or gain +4 if stationary. The character may grant the same bonus to one other character for every 1 point by which the check result exceeds 15.
15	Avoid getting lost or avoid natural hazards, such as quicksand.

Retry: For getting along in the wild or for gaining the Fortitude save bonus, the character makes a check once every 24 hours. The result of that check applies until the next check is made. To avoid getting lost or avoid natural hazards, the character makes a

check whenever the situation calls for one. Retries to avoid getting lost in a specific situation or to avoid a specific natural hazard are not allowed.

Special: If the character has 5 or more ranks of Intuit Direction, the character gets a +2 synergy bonus on Wilderness Lore checks to avoid getting lost.

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rules

feats

Third Edition Dungeons & Dragons included feats available to player classes. These feats added special powers to a character. This started a trend of feats and other systems of options that allowed for players to customize their character's class.



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rules equipment



image by BedexpStock from Pixabay

RPGs typically have charts of available equipment, usually listing cost, weight, availability, and other information.



image by BedexpStock from Pixabay

starting equipment

Usually the last step in character creation is the choice of starting equipment.

character advancement

Space holder for the chapter on character development and character advancement.

success rolls

Space holder for the chapter on success rolls.



image by adriano7492 from Pixabay

rules adventuring

Almost all RPGs have rules for adventuring.



image by Sasin Tipchai from Pixabay

rules combat

Almost all RPGs have a combat system.

The vast majority of combat systems involve the following steps: selection of actions (and order that they occur), determining the modifiers for a particular attack or action, determining the modifier for the defense, rolling dice to determine whether the attack succeeds or not, determining the modifiers for damage, rolling dice to determine the the damage (which get subtracted from some variation of hit points), along with some possible saving throw. Once you abstract everything, you just find where each games's rules fall into the steps and apply them accordingly.

The group can freely mix together whatever rules from whichever games they want, as well as make up their own rules. As long as everyone agrees, all is good.



image by Alex Yomare from Pixabay

rules magic

Fantasy RPGs usually have a magic system. Many fantasy RPGs have more than one magic system.



image by Alexandra d from Pixabay

psionics system

Some game systems have rules for psionics.



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technology

Some games have tech levels.

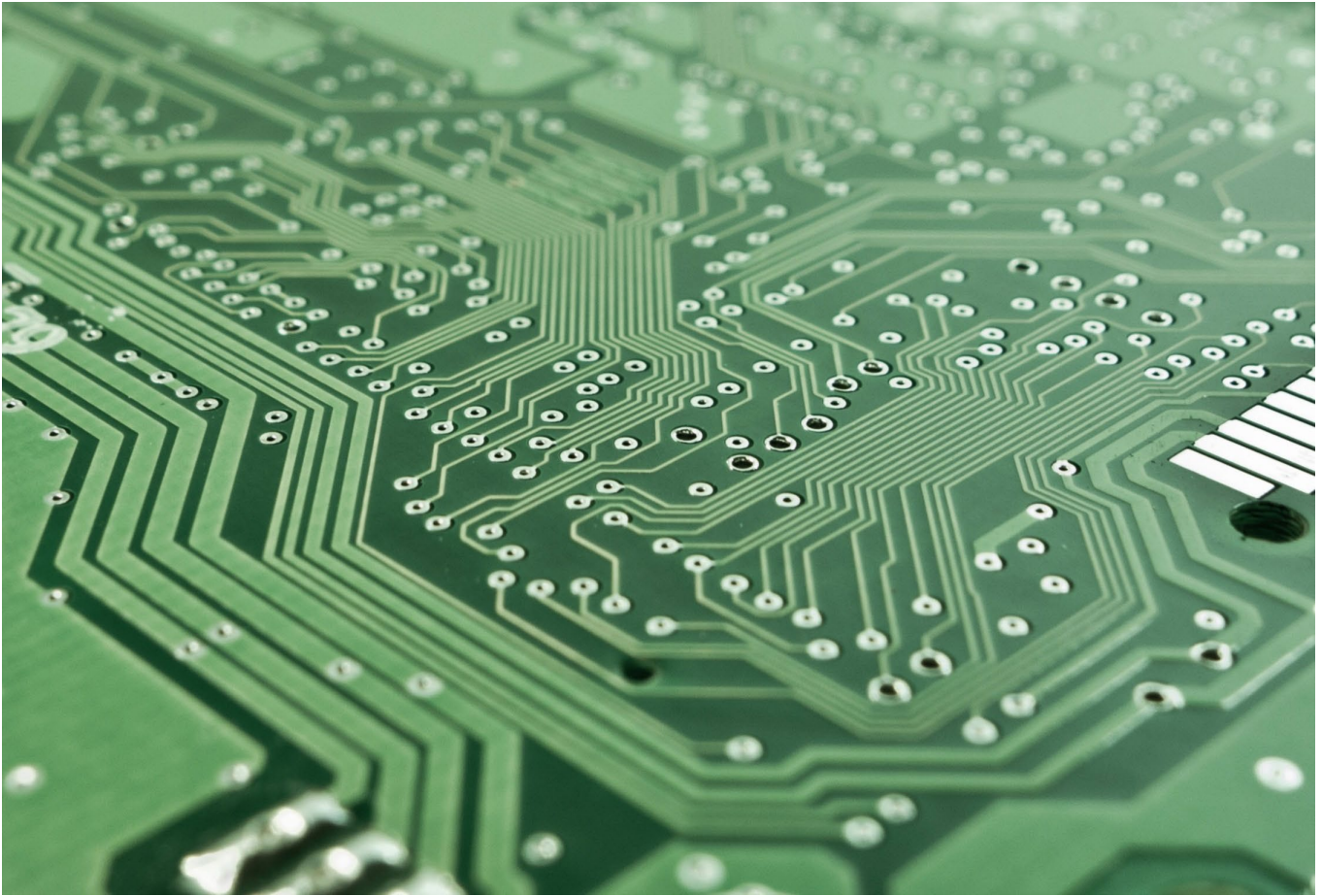


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movement

There are several kinds of movement. As if you didn't already know that. But I have to have some kind of description for the beginning of this section.



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movement

personal locomotion

Space holder for the chapter on personal locomotion.

movement

animals for transportation

Space holder for the chapter on animals for transportation.

movement

single person vehicles

Space holder for the chapter on single person vehicles.

movement

land vehicles

Space holder for the chapter on land vehicles.

movement

freight vehicles

Space holder for the chapter on freight vehicles.

movement

rail vehicles

Space holder for the chapter on rail vehicles.

movement

emergency vehicles

Space holder for the chapter on emergency vehicles.

movement

military vehicles

Space holder for the chapter on military vehicles.

movement

burrowing vehicles and machines

Space holder for the chapter on burrowing vehicles and machines.

movement

water vehicles

Space holder for the chapter on water vehicles.



image by Alexander Lesnitsky from Pixabay

movement

flying vehicles

Space holder for the chapter on flying vehicles.

movement

space vehicles

Space holder for the chapter on space vehicles.

game worlds

Space holder for the chapter on game worlds.

government

“When you are in opposition, you have one job, Just one. Everything else is superfluous. **Get into government.**”

“Now, once you are in government, there is a lot more expected. In opposition, there is one thing.” — Phil Moorhouse of the [A Different Bias](#) channel.

“But to get into government you have to persuade the public of two things.”

“One, that the current [...] government are making their lives worse.”

“This is important, because comfortable people are more likely to support the status quo, They might like things to be better, but, oh if we vote for something that might be better, it might be worse, but we’re ok as we are now, why risk it, why risk it.”

“They have to believe, rightly or wrongly, that they are suffering with the present situation.”

“But that’s not enough, because then the second thing is you have convince them that [you] will make their lives better.”

“Not hope. That these people will take a risk, because I don’t think that they will.”

“You have to convince them that it will absolutely be better under [you].” — Phil Moorhouse of the [A Different Bias](#) channel.

buildings

Space holder for the chapter on buildings.

monsters

Space holder for the chapter on monsters.

animals

Space holder for the chapter on animals.

plants

Space holder for the chapter on plants.

fungi

Space holder for the chapter on fungi.

single cell organisms

Space holder for the chapter on single cell organisms.

minerals and rocks

Space holder for the chapter on minerals and rocks.

Forge of Empires

Forge of Empires

[Forge of Empires game.](#)

playing Forge of Empires

CathyMCM used to call herself the Queen of Copy and Paste. She kept saved text handy so she had prepared answers for the most common player questions.

Summer Event 2023

For those seeking calendar keys:

There is *not* a calendar key in every shuffle (which sucks).

Before pressing the “start” button, always check the board to see if the key is there or not.

The dimmed out options are visible before clicking “start” for a new shuffle or at the automatic reset at midnight server time (Eastern Daylight Time). These will be the options that will be in the next hidden board — but in a different order.

If you don't recognize something, you can (on the computer) hover over it and get the name of the item.

You will know whether to pick up the shuffle on a Show Two and avoid wasting any more doubloons or avoid the shuffle to hunt down the calendar key that you already know is there.

decorations

From Outrageous Coder, paramedic the healer, PrincessofBast, and others:

Remove all decorations from your city (with a few exceptions).

Decorations absorb a full aid, the same as a large cultural building does, but only provides a small increase in happiness. That is a waste of valuable city space.

Some special event decorations have an additional benefit beyond happiness. Those can be worthwhile.

Some special event decorations are required to get the full benefit of a set of special event buildings. In that case, you need it.

If you need happiness, add a cultural building from your city's current age. An exception during Bronze Age and the first part of Iron Age is the Memorial decoration can be critical for happiness at the beginning of the game. Delete them once you unlock Iron Age's Triumphal Arch.

If you just plain like the looks of the decoration, it is your city, and you can make it look however you want. Losing a single city square here or there for a decoartion you really like is a fair trade — it makes you happy and the game is supposed to be fun.

During special event quests: If no age is specified, you can use any age decoration, so trees are cheap and easy, then delete them after getting credit for the quest.

aging up your city

As long as you avoid aging up too fast, how fast you age up depends on personal playing style.

Some players want to spend time in an age, especially if they are routinely trying to attack and plunder neighbors.

Some players want the thrill of advancement.

As long as you have the resources for the new age (especially if you are currently in the top 10-25 of your neighborhood, you can level up whenever you want to level up.

If you get too far ahead of the rest of the guild, you can start to run into problems such aas lack of easy access to goods and especially lack of easy access to BPs from higher age GBs.

GB sniping

Rule of thumb on GB contributions:

if the GB is brand new, everyone is encouraged to donate at least 1 FP, even if it has already levelled.

If the GB is a swap, you have permission to pay the swap -- even if you have to level up the GB -- this is a rare exception to the rule of never level up a GB unless the player says it is ok or you are trying to get revenge on the player.

If the GB is in a 1.x thread, you have permission to pay the current highest still open position.

If a player publicly or privately says it is ok to donate to their GB, then it is ok.

You can always contact any player, in or out of the guild and express interest in making a donation. If they say yes, go for it.

I think that covers the common situations -- for all other cases, best to avoid making a donation -- and remember that politely asking is always an acceptable choice.

aid button

Take the time to click the aid button for every guildmate.

It really helps everyone in your guild.

Most players will aid you back.

If you want to keep good players on your friends list, also make sure to aid and tavern visit regularly (for the same reasons).

observatory and Arc

Everyone in Early Middle Ages or higher should try to get an Observatory into your city. It is a small building, but it donates goods to the guild treasury every day you collect without taking the goods out of your inventory.

Every player should try to get a complete set of blueprints for The Arc. For new players, this may take a while. It is the best Great Building (GB) in the game.

Governor's Villa

A key special event building is the Governor's Villa. A lot of players have decided to pick one complete set of levels up each summer event.

When fully levelled, it is generally considered to be one of the best combinations of free troops and attack bonus. You can collect some levels now and pick up the rest in future special events.

The Governor's Villa gives coins and happiness (which both can be boosted when aided). It also gives population. It can be plundered if not motivated. It also gives FPs and a decent attack bonus. And it gives free troops from your current age. You do not need to have the corresponding troops building in your city.

Read this: "The Governor's Villa may also produce military units that usually are not available to the player. For example, an Early Middle Age Governor's Villa can produce Barbarians and Barbarian Slingers, and an Industrial Age Governor's Villa can produce Brave Warriors and Mounted Braves."

I think you can see why it is a popular special event building.

CathyMCM

CathyMCM was a player in the game Forge of Empires. For several years she ran a message thread entitled **@@ Chatter with Cathy & Friends @@** on multiple game worlds.

CathyMCM had a big heart and was always helping new players.

Cathy's GB Strategy

This was provided by Phebe [Arvahall]:

she was a great great player teammate and friend

This is my suggested order of obtaining GBs as soon as you can:

Babel
Zeus
LOA Lighthouse
TOR Temple of Relics
COA Cathedral of Achen
CDM Castel del Monte
SMB St. Mark's Basilica
traz Alcatraz
CF Chateau Frontenac
ARC

more good GBs



Seed Vault
 AO Arctic Orangery
 HC Himeji Castle
 SG Star Gazer
 CC Cape Canaveral
 RAH Royal Albert Hall
 SBC Saint Basil's Cathedral
 OBS Observatory

Still more possibilities

TT Truce Tower
 TA Terracotta Army
 Krak Kraken
 FD Frauenkirche of Dresden
 Deal
 LT Lotus Temple

FYI most people will delete Oracle of Delphi as soon as they have 2 or 3 other GB. The Colosseum is a colossal waste of space and most guilds won't accept a player who has one. Notre Dame is another unpopular GB.

GBG Commanders Cookbook

The GBG Commanders Cookbook

This The GBG Commanders Cookbook was compiled by CathyMCM. She credits the original author and includes additional materials from herself and others. Anything after the first set of info that isn't attributed to someone else is written by her. CathyMCM unfortunately died in March of 2022.

From wimbleton of Warped Reality on Q
 The Commanders Cookbook
 A guide to out-performance in Battlegrounds
 Our duty is to; the players, the guild, and the commanders

Players:

The most valid strategy is one which maximized the returns per UNIT loss of each member. This is true of both goods, and military units. To this end we must make our goals to:

1. Create strategies which require the LEAST total attrition gain. (both by buildings, and pruning

irrelevant sector control)

2. Maximize the number of encounters a single member may win with their resources. (Keep attrition low, and allow 'resets' via multiple targets... see 'reset')
3. Continuous direction. This is a difficult item, and impossible for any one commander. To offer clear, and continuous direction, our commanders must work together.
4. Resource controls & concern. The top two goals for a commander are unachievable without the support of the treasury. Therefore we must measure our spending, and always seek to reduce it, while remembering Goals 1 & 2 outweigh these concerns. Maximum effect, for minimum cost.

Guild:

The highest level of performance for the guild is also beneficial to our members. The guild stands to gain in multiple areas due to high performance:

1. Prestige Ranking. The only REAL measure is the guild leaderboard, and prestige is largely affected by Battlegrounds. High placement each season is paramount to high prestige ratings.
2. Guild Level. Gaining guild power is important as it raises the guild level. Guild level adds more prestige, but also decreases the troop spawn timer (Alcatraz) and give more forge points to the guild. Note that 1 additional FP is actually $1 \times 80 \times 11 = 880$ FP to the guild per season. This is a compound gain (imagine if its investment was in guild member observatories?!).
3. Recruiting. Higher guild levels, and higher prestige increase the guilds prowess and recruiting efforts. This makes the job easier for the members to outperform, as the player next to them is likely of higher and higher caliber.
4. The treasury. This variable is important to every class. The member, the guild, the commanders. It must be monitored, measured, and considered in every movement. The treasury directly impacts all (3) phases of the guilds operations; GvG, GE, GbG. Creating wealth in the treasury is a paramount concern.

Commanders:

The job of a commander is often thankless, and usually recognized more for their failure than for their success. This is true of all leaders, and must be accepted by any willing or wanting; to perform the duties. For a commander to perform at the highest level:

1. Concensus. This is of extreme importance. That commanders work towards the same goal; cannot be understated. Every tennant above this one can only be achieved at a high level, if all commanders work towards the same end.
2. Communication. There is nothing without it. Seek to communicate constantly, with commanders, members, and even outside guilds when neccessary. The pen is free - the sector costs dearly.
3. Consideration. Each movement is costing your membership something. Always consider an attack as a cost. The only free movements are mistakes performed by the enemy - they are in fact

better than free; costs paid by the enemy are the same as being given more points/goods etc.

4. Encouragement. This is an item which is easy to forget. Without encouraging both the members, and one another, the grind of battlegrounds seasons will take their toll. There is an emotional quotient which must be stimulated, or else all of the intellect, energy, and focus of both the membership and other commanders, will begin to wane. Remember to pay compliments. They are free; and contribute to higher output rates from both your members, and your fellow commanders. Ignoring this item; is to encourage failure.

Negotiating (Farming)

This is the fastest strategy for a player to complete. It is the recommended path for new players, or those which are not near to completing the "fighting" path.

Negotiations are useful in both GE and in GbG, therefore it is an acceptable route for a new player in order to get them ready for 2/3rds of the guilds activities! There are (2) great buildings which need to be leveled in order to employ this strategy. One of which is the mandatory "Arc".

Through all eras the great building requirements can be satisfied with only (2) Great buildings: Arc, Chateau Frontenac. It is also possible to add Lighthouse of Alexandria, and Saint Marks Basillica to this list in order to further empower the strategy - however it is not required for success.

Fighting

This is the slowest strategy to complete. However, it is fast to practice, and can be fun, when a player has built up to being able to sustain it. For satisfactory results there are (4) Fighting buildings in the mid eras, as well as 2 more "helper buildings" in the higher eras. In All eras this strategy requires the Alcatraz. From IA to CA at least (4) GBs will need to be leveled in order to make consistent rewards: Cathedral of Aachen, Statue of Zeus, Castle Del Monte, and Alcatraz. From CA to TE: CoA, Zeus, CdM, Traz, Kraken, Arctic Orangery, and possibly Terracotta Army. From TE+: CoA, Zeus, CdM, Traz, Kraken, Arctic Orangery, TA. This requires a lot of forge points to make the "machine" work. Lets not forget, leveling these 'quickly' is nearly impossible without the Arc. So really, we're talking about 9 great buildings to be leveled before real rewards start being payed out! This should not discourage players from practicing it. It should instead be a realization that while this is the goal, and a very FUN way to play, we can get there FASTER by farming first, and fighting later.

Tactics for the member:

Resetting.

This item should be known, and understood by all. This will create forge points, diamonds, and goods that otherwise you would have missed out on. Resetting is just as important for the Fighter as it is for the Farmer! Armies which can be "autobattled" without losing a troop, are of higher

value to the fighter, and thus should be sought out. For the farmer, it is difficult to accrue enough "previous era" goods in order to continue negotiations. Therefore, to the farmer, this 'reset' strategy is a MUST in order to maximize your abilities.

Before the How, come the why: more rewards speeds up your game. Its that simple. More encounters means more rewards, and more rewards means you've gained "time" in the game. More FPs means bigger great buildings, more goods equate to more attempts, or more FP, or more points. More more more. More diamonds equates to whatever you want.

Resetting: The HOW:

Choose whether to fight or negotiate; resetting fights does not reset negotiations, resetting negotiations does not reset fights.

We will describe "Negotiations" first.

1. On the target sector choose "Negotiate". Click one of the goods menus to see which goods are required. If ONLY current era goods are required, perform the negotiation and win. Loop back to step 1 (this step). If ANY "previous era" goods are required, STOP. Move to step 2.
2. Choose a target sector OTHER than the previously selected sector. If possible; choose a secondary sector listed in the GbG thread title. Click negotiate. Click one of the goods menus to see which goods are required. If ONLY current era goods are required, perform the negotiation and win. After winning, loop back to step 1 (the original sectors negotiations are reset). If ANY "previous era" goods are required, STOP. Move to step 3.
3. Choose a target sector OTHER than the original and previously selected sectors. If possible; choose a secondary sector listed in the GbG thread title. Click negotiate. Click one of the goods menus to see which goods are required. If ONLY current era goods are required, perform the negotiation and win. After winning, loop back to step 1 (the original sectors negotiations are reset). If ANY "previous era" goods are required, STOP. Repeat this step on another sector (one not selected since last resetting the original target).

Now as promised we will describe how to 'reset' for fights on a sector. Remember, resetting negotiations only resets negotiations, and resetting fights only resets fights. Performing these steps only alters the chosen path.

1. On the target sector choose "Fight". Select your army (1 Heavy and 7 rogues? Most likely?). Take note of the enemy forces: are these troops you can beat via auto-battle (with minimum losses)? If Yes. Perform the Auto-Battle and move to step 1 (this step). If you cannot auto-battle; are these troops you can beat via skipping turn? (Enter the battle, and when its your 'normal troop/non rogue troop' turn, choose "skip turn" or double click the tile the troop is on via desktop. This will skip turn, and you can now click auto-battle. If this strategy will not reduce losses satisfactorily, then STOP. Move to step 2.
2. Choose a target sector OTHER than the previously selected sector. If possible; choose a

secondary sector listed in the GbG thread title. Click Fight. Select your army. Take note of the enemy forces: are these troops you can beat via auto-battle (with minimum losses)? If Yes, Perform the Auto-Battle and move to step 1. If Not, STOP. Move to Step 3.

3. Choose a target sector OTHER than the original, and previously selected sectors. If possible; choose a secondary sector listed in the GbG thread title. Click fight. Select your army. Take note of the enemy forces: are these troops you can beat via auto-battle (with minimum losses)? If Yes, Perform the Auto-Battle and move to step 1. If Not, STOP. Repeat this step on another sector (one not selected since last resetting the original target).

Tactics for Commanders:

Remember your doctrine. If you cannot use your doctrine; then it is improper doctrine. Doctrine should be flexible, and enable commanders to make decisions - whilst helping them remain in consensus strategically with the other commanders. Doctrine should be revisited, and revised, often. War changes; so must strategy - and doctrine should be altered with every new strategy. Communicate your intentions. The more sectors, and ideas you communicate to your other commanders and members - the more minds will consider its validity. More calculation is key, and you cannot out-calculate many minds with only your own. Communicate your intentions, should they go unchallenged - or there isn't time for them to be, relay them as orders so they may be executed upon (change the thread title, post in discord, post in the messages).

Finally, never overrule another commander. Now matter how much you disagree - once it is in the traditional GbG warfare thread - it is law. Take your discussion, and disagreement to the commanders thread. There is can be discussed, and decided. There all commanders are expected to have an open mind. Do NOT challenge one another in the open, or you will risk nullifying the efforts of all.

Open Minded Discussion. Keep an open mind in your commanders thread. It is quite possible that some ideas will be the same as the enemy, others will out-maneuver the enemy, and still others will be the most correct - while not being the most punishing. The enemy has a vote, and even if you play perfectly, sometimes the best strategy is to watch the enemy kill themselves while practicing nothing yourself. To this end is why every voice is worth hearing - the more thoughts shared and heard, the more likely you have heard the voice of the enemy.

From Kesmic on S Battlegrounds has become an increasingly challenging but fun event to manage. It has given us great insight into how others guilds run and operate. It is for this reason that I write this message. Alliances are important for Battlegrounds. Joining up with the right guild or guilds allows us to secure a position for guild rewards while providing a stable environment for everyone to get personal rewards. With out an alliance, guilds get trampled on and will end up last. It is also important to understand how certain guild relations affect GvG (which is where get most of our ranking points from). That being said it is EXTREMELY important that we are only hitting designated targets on the maps. These targets can be found in

either the main chat or in the BG thread. Before you enter BG please check those threads to ensure you are hitting the correct target. Also, if you are approaching the completion of a sector check again to ensure that a hold or stop as not been called. Communication is the key to success here. It is difficult to maintain alliances when players are attacking provinces in a rogue like fashion. Please understand that all of your contributions are welcome but we must work as a team!

from Souron1 The highest level of performance for the guild is also beneficial to our members. The guild stands to gain in multiple areas due to high performance: 1. Prestige Ranking. The only REAL measure is the guild leaderboard, and prestige is largely effected by Battlegrounds. High placement each season is paramount to high prestige ratings. 2. Guild Level. Gaining guild power is important as it raises the guild level. Guild level adds more prestige, but also decreases the troop spawn timer (Alcatraz) and give more forge points to the guild. Note that 1 additional FP is actually $1 \times 80 \times 11 = 880$ FP to the guild per season. This is a compound gain (imagine if its investment was in guild member observatories?!). 3. Recruiting. Higher guild levels, and higher prestige increase the guilds prowess and recruiting efforts. This makes the job easier for the members to outperform, as the player next to them is likely of higher and higher caliber. 4. The treasury. This variable is important to every class. The member, the guild, the commanders. It must be monitored, measured, and considered in every movement. The treasury directly impacts all (3) phases of the guilds operations; GvG, GE, GbG. Creating wealth in the treasury is a paramount concern.

GBG Overview:

Each successful fight or negotiation earns you rewards: Diamonds, FPs, Troops, Statue of honor prints,

1 successful fight = 1 point

1 successful negotiation = 2 points in conquering a sector

...-Please follow the GBG current target only when fighting, it that sector has been taken, only attack a sector that has a flag. Send a message on the GBG thread if a sector has been taken.

We play in GBG because the guild rewards are just as great as the personal rewards. The guild is rewarded based on the finish.

Just have fun and please try to put in your fair share of fights and/or negotiations every day just like you do in GE. If you need help with goods/troops or prints for GBs just please post what you need. Everyone is here to help.

from Dylantis the All Seeing There's been a lot of chatter about siege camps in GBG lately which are, unfortunately, dependent on guild treasury resources. In order to better understand and respond to the issue, I did a bit of research on how the treasury works and how we can best allocate resources for long term success as a guild. I learned a few things that I didn't know and thought I would share my findings in case others were wondering as well.

It probably comes as no surprise that INNO has not made resource management easy or advantageous to the guilds and players. There is no easy way to reallocate resources once they have entered the guild treasury. As a guild, you can't buy goods up or down, the only way to replenish low levels of goods in the treasury is through guild member donations of the needed era. This is why many of the higher ranked fighting guilds have mandatory weekly donations for all guild members.

Another reason that resource management is so important is because all aspects of guild play (Guild Expedition, Guild vs Guild and Guild Battlegrounds) draw from the same treasury pool. Leadership has to manage that pool of goods to make sure it is not exhausted by any one aspect of the game, ie making sure that the guild does not burn through the treasury in GVG so there is nothing left for GBG or GE and vice versa.

And here again it falls back on INNO making the siege camps in GBG and laying siege in GVG more and more resource expensive the higher a guild moves up in the rankings. Being a top tier guild is of great benefit to the guild members but also, due to game mechanics, makes it exorbitantly costly to stay in that top tier.

So getting down to why, sometimes, we may not be able to fill all slots in GBG with siege camps or take that next tile in GVG. If the chance of holding a camp in GBG or a tile in GVG is slim, then it may not make sense to devote the resources, at that particular moment, waiting instead for a better opportunity that will contribute more to treasury (and guild) longevity. Because, after all, we are a guild that wants to stick around for the long term. How we do that is by focusing on sustainability of our resource pool. Watching to make sure that what goes out of the pool is not exceeding what comes in through member arc, obs, SOH and other building donations and the occasional fund raising drive.

Thank you all for understanding and please do let me know if any questions or concerns. Happy Forging! Dyl

Five to eight guilds battle each other for 11 consecutive days. Each guild starts at the edge of the battleground map with a province, which cannot be taken from them, called the headquarter (HQ). The distance between neighboring guild headquarters will be about the same. From there, the guilds can start conquering adjacent provinces. Every guild member can click on an eligible province and either perform a fight or a negotiation. These fights and negotiations will always

match the era of the player who performs it.

After completing the fight or negotiation, the member will provide his guild with one or more advancement points, which will be visualized as a conquest flag on the target province. The first guild to accumulate enough advancements will gain control over the given province, whereas all other guilds that tried to conquer it as well will lose half the advancements that they have made towards that province.

Guilds can only attack provinces which are adjacent to one of their own. With each won encounter, advancement points are gained. The guild with the highest amount of advancement points in a province will have its "conquest flag" displayed in the respective province. Other guilds having advancement points in a province have their shield displayed next to the conquest flag of the leading guild. The closer the guild with the highest progress is getting to conquering the province, the higher the strength of the displayed flag will be.

When a certain amount of advancement points is reached, the province will get taken over. The amount of advancements needed depends on the league - higher leagues needing more advancement points.

League: Copper Silver Gold Platinum Diamond

Advancements needed: 40 70 100 130 160

A province that was just taken will be under lock-down for four hours, giving the new owner some time to get victory points or build sector buildings. During lock-down, no guild can progress their conquest flag further in that province.

Attacking & Negotiating

Any guild member can tap on a province to bring up its window. There will be two options for earning points available there - Attack and Negotiate. Both the opposing army for attacking and the goods required for negotiation will depend on the player's age (similar to Guild Expeditions). Negotiating an encounter will bring more advancement points than attacking as more time and resources are required for it.

Defending

There is no means of directly defending the acquired provinces. The only way of defending your guild's provinces will be by trying to take the provinces of the attacking guild before they take yours. In this case, if the opposing guild loses all adjacent provinces they also lose all advancements that they have made towards your province.

Winning Battlegrounds

The leader board of a battleground gets dictated by victory points, which are automatically earned by every guild once per full hour. The amount of victory points gained depends on the provinces that a guild holds. Provinces towards the center of the battleground map provide way more points than those at the edge of the map. The player can see the rankings for their specific battleground at any time, listing all participating guilds, the number of provinces held, their current gain in victory points per hour, their current amount of victory points and the rewards of every rank.

Completion

Upon completion of each battleground, there will be a 3-days break for the guilds to rest, collect their rewards and make new preparations. The guild score will then be updated.

Victory Points

The Victory Points are particularly used to measure and count the points towards the completion of the current battleground, thus they are reset at the start of every new round. Each province, besides the HQ, that a guild holds will provide victory points every hour. The magnitude of points provided by a province increases the closer it is to the center of the map.

Provinces give a certain amount of victory points per hour and the values are randomized for every battleground and every season:

Provinces of the inner most ring (ring coordinate 1), may give between 100 and 200 Victory Points per hour.

Provinces of the second ring (ring coordinate 2), may give between 60 and 120 Victory Points per hour.

Provinces of the third ring (ring coordinate 3), may give between 40 and 80 Victory Points per hour.

Provinces of the outer most ring (ring coordinate 4) may give between 10 and 40 Victory Points per hour.

Attrition

Whenever a player successfully completes a battle or a negotiation (in the context of a Guild Battleground) they will build up Attrition. This is a percentage value that directly affects the (attack and defense) boosts of the defending armies and the difficulty level of the negotiations that the player will face.

So at some point, performing attacks or negotiating will become unfeasible as the defending armies become too strong and the negotiations become too complex or too expensive. However, attrition resets to 0% each day (midnight server time).

League System

According to a guild's performance, they can climb the ladder to join the highest leagues. New guilds start off in the Copper league and can advance to Silver, Gold, Platinum and Diamond league. Upon introduction of the Guild Battlegrounds on a Server, all existing guilds will get assigned to a league depending on various parameters of the guild that reflect the guilds activity.

A guild's league will be shown in the global rankings and also affects the magnitude of their battleground rewards. Performing great in a battleground will increase the guilds league rating while performing poorly will move the guild down a league.

When assembling new battlegrounds the game will always pick guilds which are of the same league.

Province Buildings

Each province has up to three slots for province buildings. Each province building affects its own or adjacent provinces in a special way. For instance, they may make taking an adjacent province easier or they may make it harder for the enemies to take the province.

Any member with the "Battleground Constructor" role can access provinces of their own guild to decide which of the available province buildings they want to build. However, each province building takes time to complete and will cost Imperial Goods guild treasury goods to be constructed.

The costs depend on the building. The costs given below are the total amount of goods which is split over three random goods. The goods can be from any era represented in the guild at the start of the battleground - bronze age players hereby will be counted as iron age players. The more players are of a specific era, the more likely it is that a needed good is from that era. The respective goods and specific amounts are randomised for every building, guild, province and battleground.

The building time can be shortened by using Diamonds 50 diamonds. The same building can be build multiple times per province if the province has multiple slots for province buildings.

If a province gets taken over, each province building that was being built there has a 50% chance to be destroyed. The remaining buildings will benefit the new owner.

From Riddick27 in Soaring Eagles Guild on S Hello everyone! I just wanted to make a general announcement. I don't know if any of you have heard about the upcoming 'Battlegrounds' feature that Inno is creating In a nutshell. According to their wiki for the new feature, it will be kind of a combination of GVG and GE. It is set up in a league system, and we will go against 8 other guilds, and it will last for 10 days. The goal will be to acquire provinces by either fighting, or negotiating (using our own goods). And if we succeed in acquiring the province, the leadership here will have the option to build a Province building. Each province has the option to build 1-3 of these buildings depending on the province size. The longer we hold the province, the more points we get. The more provinces we take, the higher the attrition for the defending army (attack and defense bonuses) in order to take control of the next province. With all of this being said, if we win the league, we get a variety of 'prizes', if you will, including prestige points, guild power, and fragments to an all new upgradeable building that will produce guild power, treasury goods, and forge points. . . . I should also mention, the fights and negotiations, will be from your era. So for me, any fighting I do, will be against Prog troops, but nothing higher. Same with goods for negotiation. I don't know for sure if they will do what GE does as far as one age below, but the next update is on the 10th of this month. Which I believe is when they will be putting it in Beta. . . . So with the attrition, it may become difficult for anyone to take the province, due to the attack and defense % continuing to rise for the defending troops of the open province. . . . GVG is not going away, but instead, this is a feature alongside of it, that will include mobile players as well.

from GypsieAnn I'm a DL GBG General Leader in my K world. I'm not sure what the goal of the guild is or what direction we want to head too. We are only 925 LP here in DL an not in top 7-14 guilds fighting it out at 1000 LPs with 5-7 guilds on a map. Which is good but it takes a great amount of treasury goods and planning to keep up the pace in top 10 having coverage 24/7, 7-days a week the entire season. We need to establish a GBG General thread for those who are in charge of calling, able to play nice and have respect towards one another as General etc. Where treasury goods stand, they will get depleted quickly Anna good cap is always having 100k of each goods. sC get expensive to build, are we going to be a trap or fortress user or rise above them since a waste if another guild or ourselves are up against them because it doesn't hurt attrition if we have. 4-5 SC (siege camps) on our tiles surrounding us cuz it doesn't kill the attrition just more rewards lol. Like I said depends on mentality of the guild. Theres many variables to which direction is best on what y'all want to do moving forward.

Vps are important. If the mentality of the guild is we focus on securing and being able to swap sectors/tiles with an alliance in a 2 to 3 guilds alliance or NAT the VPs will definitely follow. The first few days usually negotiating with other guilds leaders happens as each guild is in the process of dominating the map. However when this is in play we advance quicker. When it's a focus of farming for low attrition fights. S being a war the entire GBG just flipping sectors it's a waste of attrition and troops. If we set up with an alliance to plan swaps by getting as many rewards as possible an flipping in a checkerboard style (when possible) with another guild guarantees the rotation of A,B & C on tiers 1(middle) 2nd ring and 3rd ring leaving A-D Some 3rd rings and all 4th rings quadrants for lesser aggressive guilds to farm on an as they grow they make better alliances not enemies.

Is it always a free for all? Do we work with other guilds in GBG? What is the overall goal and direction does the guild want to pursue is what I would be interested in knowing prior to committing. That was a mouth full

We continue to have some instances where sectors get taken when there are stop signs on them. I think this is because we have not done a good enough job of educating the guild. Please read and then leave this message to signify that you understand. Thank you! -Our goal in GBG is to get as many low attrition fights/negations as we can for each season. We do this by partnering with another guild(s) and holding sectors for each other until we can coordinate a swap. -This is done by building Siege Camps on the sectors we control. Each camp reduces the attrition by 24%. If we have 5 Camps adjacent to a sector we have no attrition ($24\% \times 5 = 120\%$) -We can then "load" a partners sector to 150/160 and HOLD it. You see this in the BG thread as (B1 @150 and HOLD). Once we load a sector to 150 we put a on it. You might see the sector move past 150 and that is because a BG leader is "walking" the sector to 158 or 159. -It is then important that we "HOLD" that sector so our BG partner can use the Camps to load an adjacent sector and "HOLD" it. - Once we have all sectors loaded we coordinate on capturing "capping" them and swap the sectors between us. The sectors remain locked for 4 hours and then we do it all over again. It's very important that no one attacks a sector unless it has been approved by BG leadership. In addition it is important that no one attacks a sector that is not highlighted by a target symbol. If we mess up too many times our partner guild may drop us and find another partner and then it will be difficult to get as many fights or negotiations because we may be locked out of sectors. We need to work as a team in GBG and players that are Lone Wolves can mess up WR's reputation and alliances with other guilds. We understand that mistakes happen but deliberately ignoring holds and capturing sectors on your own may result in removal from the guild. We have people that use an outside FoE helper program that can notify the user if a sector is taken by someone. This is one way we police when mistakes are made. If you are interested in having a more involved role in BG send me a message. Please leave this message now so that BG leadership knows that you understand our rules. Thanks!

GBG note from another guild New members here should try to use Negotiations on the first 5 encounters. Those are Easy level attrition ones that only cost 1 good per slot. Scoring 10 points to Fighting's 5 helps the cause of taking sectors. Old hands here who are not doing this could step up their game by doing so. We do not have enough members to waste chances to score those points.

The GBG Commanders Cookbook

preserving her memory

This is a last minute effort to try to preserve CathyMCM's cities. The more players who participate, the more likely we will succeed.

Please contact Inno Games and ask them to preserve CathyMCM's cities until a member of her family can take over her account. Her sister had the password to go into the game and inform us of Cathy's unfortunate death and we hope that eventually one of her children might take over the account in her mother's memory.

You can contact Inno Support and they will probably recite the one year rule. Ask them to please pass the request on to higher authority in the game.

Even better, contact the higher authority directly. That would be Michael Zillmer, COO and Co-founder, or Hendrik Klindworth, Co-founder and Chief Executive Officer, or Eike Klindworth Co-founder, Creative Director and Board Member.

Send an actual physical letter (and explain how CathyMCM effected you and why it is important to preserve her memory) to: Friesenstraße 13, 20097 Hamburg, Germany, or call +49 40 7889335-0.

If you have the ability to send a fax, send it to +49 40 7889335-200 and address it to one of the three top executives.

You can also use the contact form at: innogames.com/company/contact/ or email info@innogames.com, but you don't know who might see those items.

If you are a money player, please mention that, especially if you are a big money player. Money players have more influence on Inno for obvious reasons.

Survival

survival

Survival Order of Importance:

The survival order of importance is: well, let's be clear that context matters. The exact situation will shuffle the order. So, let's look at general principles and remember that you must adjust for the situation that occurs in the game.

Order: The most common order of importance is: immediate threats (first aid and defense), planning, shelter, fire, signal, water, food, motivation.



image by klimkin from Pixabay

Conditions: In extreme cold, your first priority is fire, then shelter. In extreme heat, your first priorities are shelter, water, and then fire. In rain your first priority is shelter, followed by fire and water. Under “normal” conditions, your priorities are shelter, fire, water, then food.

STOP:

S.T.O.P.: Once any possible immediate threats are handled, apply the S.T.O.P. principle.

Stop and calm down.

Think. if you have taken care of immediate threats, there is no rush. Hurrying can put your life at risk.

Observe your surroundings. Assess your situation. Do you see any obvious shelter, water, fire building materials, or other resources?

Plan. Now come up with a plan that will keep your character alive.

SPEAR:

S.P.E.A.R.: Another survival acronym.

Stop

Plan

Execute

Assess

Re-evaluate



image by Stephen Case from Pixabay

SURVIVAL:

S.U.R.V.I.V.A.L.: A survival acronym from US Army Field Manual 3-05-70 SURVIVAL May 2002.

S—Size Up The Situation

U—Use All Your Senses, Undue Haste Makes Waste

R—Remember Where You Are

V—Vanquish Fear And Panic

I—Improvise

V—Value Living

A—Act Like The Natives

S—Size Up The Situation

L—Live By Your Wits

The following is the introductory advice from *US Army Field Manual 3-05-70 SURVIVAL May 2002*. Pertinent portions will be repeated in the appropriate chapters.

S—SIZE UP THE SITUATION

1-2. If you are in a combat situation, find a place where you can conceal yourself from the enemy. Remember, security takes priority. Use your senses of hearing, smell, and sight to get a feel for the battlespace. Determine if the enemy is attacking, defending, or withdrawing. You will have to consider what is developing on the battlespace when you make your survival plan.

Surroundings

1-3. Determine the pattern of the area. Get a feel for what is going on around you. Every environment, whether forest, jungle, or desert, has a rhythm or pattern. This tempo includes animal and bird noises and movements and insect sounds. It may also include enemy traffic and civilian movements.

Physical Condition

1-4. The pressure of the battle you were in or the trauma of being in a survival situation may have caused you to overlook wounds you received. Check your wounds and give yourself first aid. Take care to prevent further bodily harm. For instance, in any climate, drink plenty of water to prevent dehydration. If you are in a cold or wet climate, put on additional clothing to prevent hypothermia.

Equipment

1-5. Perhaps in the heat of battle, you lost or damaged some of your equipment. Check to see what equipment you have and what condition it is in.

1-6. Now that you have sized up your situation, surroundings, physical condition, and equipment, you are ready to make your survival plan. In doing so, keep in mind your basic physical needs—water, food, and shelter.

U—USE ALL YOUR SENSES, UNDUE HASTE MAKES WASTE

1-7. You may make a wrong move when you react quickly without thinking or planning. That move may result in your capture or death. Don't move just for the sake of taking action. Consider all aspects of your situation before you make a decision and a move. If you act in haste, you may forget or lose some of your equipment. In your haste you may also become disoriented so that you don't know which way to go. Plan your moves. Be ready to move out quickly without endangering yourself if the enemy is near you. Use all your senses to evaluate the situation. Note sounds and smells. Be sensitive to temperature changes. Always be observant.

R—REMEMBER WHERE YOU ARE

1-8. Spot your location on your map and relate it to the surrounding terrain. This basic principle is one that you must **always** follow. If there are other persons with you, make sure they also know their location. Always know who in your group, vehicle, or aircraft has a map and compass. If that person is killed, you will have to get the map and compass from him. Pay close attention to where you are and where you are going. Do not rely on others in the group to keep track of the route. Constantly orient yourself. Always try to determine, as a minimum, how **your** location relates to the location of—

- Enemy units and controlled areas.
- Friendly units and controlled areas.
- Local water sources (especially important in the desert).
- Areas that will provide good cover and concealment.

1-9. This information will allow you to make intelligent decisions when you are in a survival and evasion situation.

V—VANQUISH FEAR AND PANIC

1-10. The greatest enemies in a combat survival and evasion situation are fear and panic. If uncontrolled, they can destroy your ability to make an intelligent decision. They may cause you to react to your feelings and imagination rather than to your situation. These emotions can drain your energy and thereby cause other negative emotions. Previous survival and evasion training and self-confidence will enable you to vanquish fear and panic.

I—IMPROVISE

1-11. In the United States (U.S.), we have items available for all our needs. Many of these items are cheap to replace when damaged. Our easy-come, easy-go, easy-to-replace culture makes it unnecessary for us to improvise. This inexperience in “making doâ” can be an enemy in a survival situation. Learn to improvise. Take a tool designed for a specific purpose and see how many other uses you can make of it.

1-12. Learn to use natural objects around you for different needs. An example is using a rock for a hammer. No matter how complete a survival kit you have with you, it will run out or wear out after a while. Your imagination must take over when your kit wears out.

V—VALUE LIVING

1-13. All of us were born kicking and fighting to live, but we have become used to

the soft life. We have become creatures of comfort. We dislike inconveniences and discomforts. What happens when we are faced with a survival situation with its stresses, inconveniences, and discomforts? This is when the will to live—placing a high value on living—is vital. The experience and knowledge you have gained through life and your Army training will have a bearing on your will to live. Stubbornness, a refusal to give in to problems and obstacles that face you, will give you the mental and physical strength to endure.

A—ACT LIKE THE NATIVES

1-14. The natives and animals of a region have adapted to their environment. To get a feel of the area, watch how the people go about their daily routine. When and what do they eat? When, where, and how do they get their food? When and where do they go for water? What time do they usually go to bed and get up? These actions are important to you when you are trying to avoid capture.

1-15. Animal life in the area can also give you clues on how to survive. Animals also require food, water, and shelter. By watching them, you can find sources of water and food.

WARNING

Animals cannot serve as an absolute guide to what you can eat and drink.
Many animals eat plants that are toxic to humans.

1-16. Keep in mind that the reaction of animals can reveal your presence to the enemy.

1-17. If in a friendly area, one way you can gain rapport with the natives is to show interest in their tools and how they get food and water. By studying the people, you learn to respect them, you often make valuable friends, and, most important, you learn how to adapt to their environment and increase your chances of survival.

L—LIVE BY YOUR WITS, *BUT FOR NOW*, LEARN BASIC SKILLS

1-18. Without training in basic skills for surviving and evading on the battlespace, your chances of living through a combat survival and evasion situation are slight.

1-19. Learn these basic skills **now**—not when you are headed for or are in the battle. How you decide to equip yourself before deployment will affect whether or not you survive. You need to know about the environment to which you are going, and you must practice basic skills geared to that environment. For instance, if you are going

to a desert, you need to know how to get water.

1-20. Practice basic survival skills during all training programs and exercises. Survival training reduces fear of the unknown and gives you self-confidence. It teaches you to **live by your wits**.

survival immediate threats

survival immediate threats

Immediate Threats:

Immediate Threats: Any pressing threats that must be dealt with immediately come first. One obvious situation is combat or imminent combat. Fight and survive. Combat may not be other humanoids. A hungry lion, tiger, or bear can seriously ruin your day. The other obvious situation is injury. Stabilize the injury. The rule of threes claims that you can die in about three minutes from severe bleeding, icy water, lack of breathing, or cardiac arrest.

survival

calm down

survival

calm down

Calm Down

Calm: Your first step is to calm down so that you respond to your situation in an intelligent manner rather than based on adrenaline.

US Army Field Manual 3-05-70 **SURVIVAL** May 2002:

V—VANQUISH FEAR AND PANIC

1-10. The greatest enemies in a combat survival and evasion situation are fear and panic. If uncontrolled, they can destroy your ability to make an intelligent decision. They may cause you to react to your feelings and imagination rather than to your situation. These emotions can drain your energy and thereby cause other negative emotions. Previous survival and evasion training and self-confidence will enable you to vanquish fear and panic.

survival

assess situation

survival

assess situation

Assess:

Assess: Observe your environment and assess you available resources and choices.

US Army Field Manual 3-05-70 **SURVIVAL** May 2002:

S—SIZE UP THE SITUATION

1-2. If you are in a combat situation, find a place where you can conceal yourself from the enemy. Remember, security takes priority. Use your senses of hearing, smell, and sight to get a feel for the battlespace. Determine if the enemy is attacking, defending, or withdrawing. You will have to consider what is developing on the battlespace when you make your survival plan.

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Equipment

1-5. Perhaps in the heat of battle, you lost or damaged some of your equipment. Check to see what equipment you have and what condition it is in.

1-6. Now that you have sized up your situation, surroundings, physical condition, and equipment, you are ready to make your survival plan. In doing so, keep in mind your basic physical needs—water, food, and shelter.

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- Friendly units and controlled areas.
- Local water sources (especially important in the desert).

- Areas that will provide good cover and concealment.

1-9. This information will allow you to make intelligent decisions when you are in a survival and evasion situation.

survival plan

survival plan



image by Gerd Altmann from Pixabay

Plan:

Plan: Plan how you will respond to your situation.

Come up with a plan that will keep your character alive.

survival pattern for survival

survival pattern for survival

US Army Field Manual 3-05-70 **SURVIVAL** May 2002:

A—ACT LIKE THE NATIVES

1-14. The natives and animals of a region have adapted to their environment. To get a feel of the area, watch how the people go about their daily routine. When and what do they eat? When, where, and how do they get their food? When and where do they go for water? What time do they usually go to bed and get up? These actions are important to you when you are trying to avoid capture.

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Animals cannot serve as an absolute guide to what you can eat and drink.
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- 1-16. Keep in mind that the reaction of animals can reveal your presence to the enemy.
- 1-17. If in a friendly area, one way you can gain rapport with the natives is to show interest in their tools and how they get food and water. By studying the people, you learn to respect them, you often make valuable friends, and, most important, you learn how to adapt to their environment and increase your chances of survival.

PATTERN FOR SURVIVAL

- 1-21. Develop a survival pattern that lets you beat the enemies of survival. This survival pattern must include food, water, shelter, fire, first aid, and signals placed in order of importance. For example, in a cold environment, you would need a **fire** to get warm; a **shelter** to protect you from the cold, wind, and rain or snow; traps or snares to get **food**; a means to **signal** friendly aircraft; and **first aid** to maintain health. If you are injured, first aid has top priority no matter what climate you are in.
- 1-22. Change your survival pattern to meet your immediate physical needs as the environment changes. As you read the rest of this manual, keep in mind the keyword SURVIVAL, what each letter signifies (Figure 1-1), and the need for a survival pattern.

S	Size Up the Situation (Surroundings, Physical Condition, Equipment)
U	Use All Your Senses, Undue Haste Makes Waste
R	Remember Where You Are
V	Vanquish Fear and Panic
I	Improvise
V	Value Living
A	Act Like the Natives
L	Live by Your Wits, <i>But for Now</i> , Learn Basic Skills

Figure 1-1. Guidelines for Survival

survival psychology of survival

survival psychology of survival

US Army Field Manual 3-05-70 **SURVIVAL** May 2002:

Psychology of Survival

It takes much more than the knowledge and skills to build shelters, get food, make fires, and travel without the aid of standard navigational devices to live successfully through a survival situation. Some people with little or no survival training have managed to survive life-threatening circumstances. Some people with survival training have not used their skills and died. A key ingredient in any survival situation is the mental attitude of the individual involved. Having survival skills is important; having the will to survive is essential. Without a desire to survive, acquired skills serve little purpose and invaluable knowledge goes to waste.

There is a psychology to survival. You will face many stressors in a survival environment that ultimately will affect your mind. These stressors can produce thoughts and emotions that, if poorly understood, can transform a confident, well-trained person into an indecisive, ineffective individual with questionable ability to survive. Thus, you must be aware of and be able to recognize those stressors commonly associated with survival. It is also imperative that you be aware of your reactions to the wide variety of stressors associated with survival. This chapter identifies and explains the nature of stress, the stressors of survival, and those internal reactions that you will naturally experience when faced with the stressors of a real-world survival situation. The knowledge you gain from this chapter and the remainder of this manual, will prepare you to come through the toughest times **alive**.

A LOOK AT STRESS

2-1. Before we can understand our psychological reactions in a survival setting, it is helpful to first know a little bit about stress and its effects. Stress is not a disease that you cure and eliminate. Instead, it is a condition we all experience. Stress can be described as our reaction to pressure. It is the name given to the experience we have as we physically, mentally, emotionally, and spiritually respond to life's tensions.

NEED FOR STRESS

2-2. We need stress because it has many positive benefits. Stress provides us with challenges; it gives us chances to learn about our values and strengths. Stress can show our ability to handle pressure without breaking. It tests our adaptability and flexibility, and can stimulate us to do our best. Because we usually do not consider unimportant events stressful, stress can also be an excellent indicator of the significance we attach to an event—in other words, it highlights what is important to us.

2-3. We need to have some stress in our lives, but too much of anything can be bad. The goal is to have stress, but not an excess of it. Too much stress can take its toll on people and organizations. Too much stress leads to distress. Distress causes an uncomfortable tension that we try to escape or, preferably, avoid. Listed below are a few of the common signs of distress that you may encounter when faced with too much stress:

- Difficulty making decisions.
- Angry outbursts.
- Forgetfulness.
- Low energy level.
- Constant worrying.

- Propensity for mistakes.
- Thoughts about death or suicide.
- Trouble getting along with others.
- Withdrawing from others.
- Hiding from responsibilities.
- Carelessness.

2-4. As you can see, stress can be constructive or destructive. It can encourage or discourage, move us along or stop us dead in our tracks, and make life meaningful or seemingly meaningless. Stress can inspire you to operate successfully and perform at your maximum efficiency in a survival situation. It can also cause you to panic and forget all your training. Your key to survival is your ability to manage the inevitable stresses you will encounter. The person that survives is one who works with his stresses instead of letting his stresses work on him.

SURVIVAL STRESSORS

2-5. Any event can lead to stress and, as everyone has experienced, events don't always come one at a time. Often, stressful events occur simultaneously. These events are not stress, but they produce it and are called "stressors." Stressors are the obvious cause while stress is the response. Once the body recognizes the presence of a stressor, it then begins to act to protect itself.

2-6. In response to a stressor, the body prepares either to "fight or flee." This preparation involves an internal SOS sent throughout the body. As the body responds to this SOS, the following actions take place:

- The body releases stored fuels (sugar and fats) to provide quick energy.
- Breathing rate increases to supply more oxygen to the blood.
- Muscle tension increases to prepare for action.
- Blood clotting mechanisms are activated to reduce bleeding from cuts.
- Senses become more acute (hearing becomes more sensitive, pupils dilate, smell becomes sharper) so that you are more aware of your surroundings.
- Heart rate and blood pressure rise to provide more blood to the muscles.

This protective posture lets you cope with potential dangers. However, you cannot maintain this level of alertness indefinitely.

2-7. Stressors are not courteous; one stressor does not leave because another one arrives. Stressors add up. The cumulative effect of minor stressors can be a major distress if they all happen too close together. As the body's resistance to stress wears down and the sources of stress continue (or increase), eventually a state of exhaustion arrives. At this point, the ability to resist stress or use it in a positive way gives out and signs of distress appear. Anticipating stressors and developing strategies to cope with them are two ingredients in the effective management of stress. Therefore, it is essential that you be aware of the types of stressors that you will encounter. The following paragraphs explain a few of these.

Injury, Illness, or Death

2-8. Injury, illness, and death are real possibilities that you have to face. Perhaps nothing is more stressful than being alone in an unfamiliar environment where you could die from hostile action, an accident, or from eating something lethal. Illness and injury can also add to stress by limiting your ability to maneuver, get food and drink, find shelter, and defend yourself. Even if illness and injury don't lead to death, they add to stress through the pain and discomfort they generate. It is only by controlling the stress associated with the vulnerability to injury, illness, and death that you can have the courage to take the risks associated with survival tasks.

Uncertainty and Lack of Control

2-9. Some people have trouble operating in settings where everything is not clear-cut. The only guarantee in a survival situation is that nothing is guaranteed. It can be extremely stressful operating on limited information in a setting where you have limited control of your surroundings. This uncertainty and lack of control also add to the stress of being ill, injured, or killed.

Environment

2-10. Even under the most ideal circumstances, nature is quite formidable. In survival, you will have to contend with the stressors of weather, terrain, and the variety of creatures inhabiting an area. Heat, cold, rain, winds, mountains, swamps, deserts, insects, dangerous reptiles, and other animals are just a few of the challenges that you will encounter while working to survive. Depending on how you handle the stress of your environment, your surroundings can be either a source of food and protection or can be a cause of extreme discomfort leading to injury, illness, or death.

Hunger and Thirst

2-11. Without food and water you will weaken and eventually die. Thus, getting and preserving food and water takes on increasing importance as the length of time in a survival setting increases. Foraging can also be a big source of stress since you are

used to having your provisions issued.

Fatigue

2-12. Forcing yourself to continue surviving is not easy as you grow more tired. It is possible to become so fatigued that the act of just staying awake is stressful in itself.

Isolation

2-13. There are some advantages to facing adversity with others. As a soldier you learn individual skills, but you train to function as part of a team. Although we complain about higher headquarters, we become used to the information and guidance it provides, especially during times of confusion. Being in contact with others also provides a greater sense of security and a feeling someone is available to help if problems occur. A significant stressor in survival situations is that often you have to rely solely on your own resources.

2-14. The survival stressors mentioned in this section are by no means the only ones you may face. Remember, what is stressful to one person may not be stressful to another. Your experiences, training, personal outlook on life, physical and mental conditioning, and level of self-confidence contribute to what you will find stressful in a survival environment. The object is not to avoid stress, but rather to manage the stressors of survival and make them work for you.

2-15. We now have a general knowledge of stress and the stressors common to survival. The next step is to examine your reactions to the stressors you may face.

NATURAL REACTIONS

2-16. Man has been able to survive many shifts in his environment throughout the centuries. His ability to adapt physically and mentally to a changing world kept him alive while other species around him gradually died off. The same survival mechanisms that kept our forefathers alive can help keep you alive as well! However, the survival mechanisms that can help you can also work against you if you do not understand and anticipate their presence.

2-17. It is not surprising that the average person will have some psychological reactions in a survival situation. The following paragraphs explain some of the major internal reactions that you or anyone with you might experience with the previously stated survival stressors.

FEAR

2-18. Fear is our emotional response to dangerous circumstances that we believe have the potential to cause death, injury, or illness. This harm is not just limited to physical damage; the threat to your emotional and mental well-being can generate

fear as well. If you are trying to survive, fear can have a positive function if it encourages you to be cautious in situations where recklessness could result in injury. Unfortunately, fear can also immobilize you. It can cause you to become so frightened that you fail to perform activities essential for survival. Most people will have some degree of fear when placed in unfamiliar surroundings under adverse conditions. There is no shame in this! You must train yourself not to be overcome by your fears. Ideally, through realistic training, you can acquire the knowledge and skills needed to increase your confidence and thereby manage your fears.

ANXIETY

2-19. Associated with fear is anxiety. Because it is natural for you to be afraid, it is also natural for you to experience anxiety. Anxiety can be an uneasy, apprehensive feeling you get when faced with dangerous situations (physical, mental, and emotional). When used in a healthy way, anxiety can urge you to act to end, or at least master, the dangers that threaten your existence. If you were never anxious, there would be little motivation to make changes in your life. In a survival setting you can reduce your anxiety by performing those tasks that will ensure you come through the ordeal alive. As you reduce your anxiety, you also bring under control the source of that anxiety— your fears. In this form, anxiety is good; however, anxiety can also have a devastating impact. Anxiety can overwhelm you to the point where you become easily confused and have difficulty thinking. Once this happens, it will become increasingly difficult for you to make good judgments and sound decisions. To survive, you must learn techniques to calm your anxieties and keep them in the range where they help, not hurt.

ANGER AND FRUSTRATION

2-20. Frustration arises when you are continually thwarted in your attempts to reach a goal. The goal of survival is to stay alive until you can reach help or until help can reach you. To achieve this goal, you must complete some tasks with minimal resources. It is inevitable, in trying to do these tasks, that something will go wrong; that something will happen beyond your control; and that with your life at stake, every mistake is magnified in terms of its importance. Thus, eventually, you will have to cope with frustration when a few of your plans run into trouble. One outgrowth of this frustration is anger. There are many events in a survival situation that can frustrate or anger you. Getting lost, damaged or forgotten equipment, the weather, inhospitable terrain, enemy patrols, and physical limitations are just a few sources of frustration and anger. Frustration and anger generate impulsive reactions, irrational behavior, poorly thought-out decisions, and, in some instances, an “I quitâ” attitude (people sometimes avoid doing something they can’t master). If you can harness and properly channel the emotional intensity associated with anger and frustration, you can productively act as you answer the challenges of survival. If you do not properly focus your angry feelings, you can waste much energy in activities that do little to further either your chances of survival or the chances of those around you.

DEPRESSION

2-21. You would be a rare person indeed if you did not get sad, at least momentarily, when faced with the hardships of survival. As this sadness deepens, it becomes “depression.” Depression is closely linked with frustration and anger. Frustration will cause you to become increasingly angry as you fail to reach your goals. If the anger does not help you succeed, then the frustration level goes even higher. A destructive cycle between anger and frustration will continue until you become worn down— physically, emotionally, and mentally. When you reach this point, you start to give up, and your focus shifts from “What can I do” to “There is nothing I can do.” Depression is an expression of this hopeless, helpless feeling. There is nothing wrong with being sad as you temporarily think about your loved ones and remember what life is like back in “civilization” or “the world.” Such thoughts, in fact, can give you the desire to try harder and live one more day. On the other hand, if you allow yourself to sink into a depressed state, then it can sap all your energy and, more important, your will to survive. It is imperative that you resist succumbing to depression.

LONELINESS AND BOREDOM

2-22. Man is a social animal. Human beings enjoy the company of others. Very few people want to be alone all the time! There is a distinct chance of isolation in a survival setting. Isolation is not bad. Loneliness and boredom can bring to the surface qualities you thought only others had. The extent of your imagination and creativity may surprise you. When required to do so, you may discover some hidden talents and abilities. Most of all, you may tap into a reservoir of inner strength and fortitude you never knew you had. Conversely, loneliness and boredom can be another source of depression. If you are surviving alone, or with others, you must find ways to keep your mind productively occupied. Additionally, you must develop a degree of self- sufficiency. You must have faith in your capability to “go it alone.”

GUILT

2-23. The circumstances leading to your being in a survival setting are sometimes dramatic and tragic. It may be the result of an accident or military mission where there was a loss of life. Perhaps you were the only survivor or one of a few survivors. While naturally relieved to be alive, you simultaneously may be mourning the deaths of others who were less fortunate. It is not uncommon for survivors to feel guilty about being spared from death while others were not. This feeling, when used in a positive way, has encouraged people to try harder to survive with the belief they were allowed to live for some greater purpose in life. Sometimes, survivors tried to stay alive so that they could carry on the work of those killed. Whatever reason you give yourself, do not let guilt feelings prevent you from living. The living who abandon their chance to survive accomplish nothing. Such an act would be the greatest tragedy.

PREPARING YOURSELF

2-24. Your mission in a survival situation is to stay alive. The assortment of thoughts and emotions you will experience in a survival situation can work for you, or they can work to your downfall. Fear, anxiety, anger, frustration, guilt, depression, and loneliness are all possible reactions to the many stressors common to survival. These reactions, when controlled in a healthy way, help to increase your likelihood of surviving. They prompt you to pay more attention in training, to fight back when scared, to take actions that ensure sustenance and security, to keep faith with your fellow team members, and to strive against large odds. When you cannot control these reactions in a healthy way, they can bring you to a standstill. Instead of rallying your internal resources, you listen to your internal fears. These fears will cause you to experience psychological defeat long before you physically succumb. Remember, survival is natural to everyone; being unexpectedly thrust into the life-or-death struggle of survival is not. Do not be afraid of your “natural reactions to this unnatural situation.” Prepare yourself to rule over these reactions so they serve your ultimate interest—staying alive with honor and dignity.

2-25. Being prepared involves knowing that your reactions in a survival setting are productive, not destructive. The challenge of survival has produced countless examples of heroism, courage, and self-sacrifice. These are the qualities a survival situation can bring out in you if you have prepared yourself. Below are a few tips to help prepare yourself psychologically for survival. Through studying this manual and attending survival training you can develop the “survival attitude.”

KNOW YOURSELF

2-26. You should take the time through training, family, and friends to discover who you are on the inside. Strengthen your stronger qualities and develop the areas that you know are necessary to survive.

ANTICIPATE FEARS

2-27. Don't pretend that you will have no fears. Begin thinking about what would frighten you the most if forced to survive alone. Train in those areas of concern to you. The goal is not to eliminate the fear, but to build confidence in your ability to function despite your fears.

BE REALISTIC

2-28. Don't be afraid to make an honest appraisal of situations. See circumstances as they are, not as you want them to be. Keep your hopes and expectations within the estimate of the situation. When you go into a survival setting with unrealistic expectations, you may be laying the groundwork for bitter disappointment. Follow the adage, “Hope for the best, prepare for the worst.” It is much easier to adjust to pleasant surprises about your unexpected good fortunes than to be upset by your unexpected harsh circumstances.

ADOPT A POSITIVE ATTITUDE

2-29. Learn to see the potential good in everything. Looking for the good not only boosts morale, it also is excellent for exercising your imagination and creativity.

REMIND YOURSELF WHAT IS AT STAKE

2-30. Failure to prepare yourself psychologically to cope with survival leads to reactions such as depression, carelessness, inattention, loss of confidence, poor decision making, and giving up before the body gives in. Remember that your life and the lives of others who depend on you are at stake.

TRAIN

2-31. Through military training and life experiences, begin today to prepare yourself to cope with the rigors of survival. Demonstrating your skills in training will give you the confidence to call upon them should the need arise. Remember, the more realistic the training, the less overwhelming an actual survival setting will be.

LEARN STRESS MANAGEMENT TECHNIQUES

2-32. People under stress have a potential to panic if they are not well-trained and not prepared psychologically to face whatever the circumstances may be. While you often cannot control the survival circumstances in which you find yourself, it is within your ability to control your response to those circumstances. Learning stress management techniques can significantly enhance your capability to remain calm and focused as you work to keep yourself and others alive. A few good techniques to develop include relaxation skills, time management skills, assertiveness skills, and cognitive restructuring skills (the ability to control how you view a situation). Remember, "the will to survive" can also be considered "the refusal to give up."

survival motivation

survival motivation

Motivation:

Motivation: Stay motivated. Do things that will improve your morale. There are cases where a survivor did almost everything wrong and still lived just on sheer willpower and desire to stay alive.

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V—VALUE LIVING

1-13. All of us were born kicking and fighting to live, but we have become used to the soft life. We have become creatures of comfort. We dislike inconveniences and discomforts. What happens when we are faced with a survival situation with its stresses, inconveniences, and discomforts? This is when the will to live— placing a high value on living—is vital. The experience and knowledge you have gained through life and your Army training will have a bearing on your will to live. Stubbornness, a refusal to give in to problems and obstacles that face you, will give you the mental and physical strength to endure.

survival tools and equipment

survival tools and equipment

US Army Field Manual 3-05-70 **SURVIVAL** May 2002:

Equipment

1-5. Perhaps in the heat of battle, you lost or damaged some of your equipment. Check to see what equipment you have and what condition it is in.

1-6. Now that you have sized up your situation, surroundings, physical condition, and equipment, you are ready to make your survival plan. In doing so, keep in mind your basic physical needs—water, food, and shelter.

I—IMPROVISE

1-11. In the United States (U.S.), we have items available for all our needs. Many of these items are cheap to replace when damaged. Our easy-come, easy-go, easy-to-replace culture makes it unnecessary for us to improvise. This inexperience in “making do” can be an enemy in a survival situation. Learn to improvise. Take a tool designed for a specific purpose and see how many other uses you can make of it.

1-12. Learn to use natural objects around you for different needs. An example is using a rock for a hammer. No matter how complete a survival kit you have with you, it will run out or wear out after a while. Your imagination must take over when your kit wears out.

Equipment

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Survival Kits:

A **survival kit** or **emergency kit** is a collection of vital tools and equipment in some easy to transport container.

A **bug out bag** or BOB is a portable kit that normally contains the items one would require to survive for 72 hours when evacuating from a disaster, although some kits are designed to last longer periods. The term may be derived from the bail-out bag emergency kit carried by military aviators.

A **go-kit** is used in amateur radio to describe a combination personal bug-out bag and portable amateur radio station.

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Survival Planning and Survival Kits

A survival plan is dependent on three separate but intertwined parts to be successful:

planning, preparation, and practice.

Survival planning is nothing more than realizing something could happen that would put you in a survival situation and, with that in mind, taking steps to increase your chances of survival. It can happen to anyone, anywhere, anytime, so remember: **failure to plan is a plan to fail**. Plans are based on evasion and recovery (E&R) considerations and the availability of resupply or emergency bundles. You must take into consideration the mission duration and the distance to friendly lines; the environment, to include the terrain and weather and possible changes in the weather during a protracted mission; and the platform you will be operating with, such as an aircraft, a multipurpose vehicle, or perhaps just a rucksack. Planning also entails looking at those E&R routes and knowing by memory the major geographical features in case your map and compass are lost. You can use classified and unclassified sources such as the Internet, encyclopedias, and geographic magazines to assist you in planning.

Preparation means preparing yourself and your survival kit for those contingencies that you have in your plan. A plan without any preparation is just a piece of paper. It will not keep you alive. Prepare yourself by making sure your immunizations and dental work are up-to-date. Prepare your uniform by having the newest uniform for emergencies. It will have the most infrared-defeating capabilities possible. You can have signal devices and snare wire sewn into it ahead of time. Break in your boots and make sure that the boots have good soles and water- repellent properties. Study the area, climate, terrain, and indigenous methods of food and water procurement. You should continuously assess data, even after the plan is made, to update the plan as necessary and give you the greatest possible chance of survival. Another example of preparation is finding the emergency exits on an aircraft when you board it for a flight. Practice those things that you have planned with the items in your survival kit. Checking ensures that items work and that you know how to use them. Build a fire in the rain so you know that when it is critical to get warm, you can do it. Review the medical items in your kit and have instructions printed on their use so that even in times of stress, you will not make life- threatening errors.

IMPORTANCE OF PLANNING

3-1. Detailed prior planning is essential in potential survival situations. Including survival considerations in mission planning will enhance your chances of survival if an emergency occurs. For example, if your job requires that you work in a small, enclosed area that limits what you can carry on your person, plan where you can put your rucksack or your load-bearing equipment (LBE). Put it where it will not prevent you from getting out of the area quickly, yet where it is readily accessible.

3-2. One important aspect of prior planning is preventive medicine. Ensuring that you have no dental problems and that your immunizations are current will help you avoid potential dental or health problems. Some dental problems can progress to the point that you may not be able to eat enough to survive. Failure to keep your shots current may mean your body is not immune to diseases that are prevalent in the

area.

3-3. Preparing and carrying a survival kit is as important as the considerations mentioned above. All Army aircraft have survival kits on board for the type of area over which they will fly. There are kits for over-water, hot climate, and cold climate survival. Each crewmember will also be wearing an aviator survival vest (Appendix A describes these survival kits). Know the location of these kits on the aircraft and what they contain in case of crash or ditching. There are also soldier kits for tropical and temperate survival. These kits are expensive and not always available to every soldier. However, if you know what these kits contain, and on what basis they are built, you will be able to plan and to prepare your own survival kit that may be better suited to you than an off-the-shelf one.

3-4. Even the smallest survival kit, if properly prepared, is invaluable when faced with a survival problem. However, before making your survival kit, consider your unit's mission, the operational environment, and the equipment and vehicles assigned to your unit.

SURVIVAL KITS

3-5. The environment is the key to the types of items you will need in your survival kit. How much equipment you put in your kit depends on how you will carry the kit. A kit carried on your body will have to be smaller than one carried in a vehicle. Always layer your survival kit—body, load-bearing vest or equipment, and platform (rucksack, vehicle, or aircraft). Keep the most important items on your body. For example, your map and compass should always be on your body, as should your basic life-sustaining items (knife, lighter). Carry less important items on your LBE. Place bulky items in the rucksack.

3-6. In preparing your survival kit, select items that are multipurpose, compact, lightweight, durable, and most importantly, functional. An item is not good if it looks great but doesn't do what it was designed for. Items should complement each other from layer to layer. A signal mirror in your pocket can be backed up by pen flares in your LBE and a signal panel in your rucksack. A lighter in your uniform can be augmented by a magnesium bar in your LBE and additional dry tinder in your rucksack.

3-7. Your survival kit need not be elaborate. You need only functional items that will meet your needs and a case to hold the items. For the case, you might want to use a bandage box, soap dish, tobacco tin, first-aid case, ammunition pouch, or another suitable case. This case should be—

- Water-repellent or waterproof.
- Easy to carry or attach to your body.
- Suitable to accept various-sized components.

- Durable.

3-8. Your survival kit should be broken down into the following categories:

- Water.
- Fire.
- Shelter.
- Food.
- Medical.
- Signal.
- Miscellaneous.

3-9. Each category should contain items that allow you to sustain your basic needs. For example, water—you should have items that allow you to scoop up, draw up, soak up, or suck up water; something to gather rainwater, condensation, or perspiration; something to transport water; and something to purify or filter water. Some examples of each category are as follows:

- Water—purification tablets, non-lubricated condoms for carrying water, bleach, povidone-iodine drops, cravats, sponges, small plastic or rubber tubing, collapsible canteens or water bags.
- Fire—lighter, metal match, waterproof matches, magnesium bar, candle, magnifying lens.
- Shelter—550 parachute cord, large knife, machete or hatchet, poncho, space blanket, hammock, mosquito net, wire saw.
- Food—knife, snare wire, fishhooks, fish and snare line, bouillon cubes or soup packets, high-energy food bars, granola bars, gill or yeti net, aluminum foil, freezer bags.
- Medical—oxytetracycline tablets (to treat diarrhea or infection), surgical blades or surgical preparation knife, butterfly sutures, lip balm, safety pins, sutures, antidiarrheal medication (imodium), antimalarial medication (doxycycline), broad-spectrum antibiotics (rocephin and zithromax) and broad spectrum topical ophthalmic (eye) antibiotic, antifungal, anti-inflammatory (ibuprofen), petrolatum gauze, and soap. Medical items may make up approximately 50 percent of your survival kit.

- Signal—signaling mirror, strobe, pen flares, whistle, U.S. flag, pilot scarf or other bright orange silk scarf, glint tape, flashlight, laser pointer, solar blanket.
- Miscellaneous—wrist compass, needle and thread, money, extra eyeglasses, knife sharpener, cork, camouflage stick, and survival manual.

3-10. Include a weapon only if the situation so dictates. Ambassadors and theater commanders may prohibit weapons even in extreme circumstances. Read and practice the survival techniques in this manual and apply these basic concepts to those you read about in other civilian publications. Consider your mission and the environment in which you will operate. Then prepare your survival kit with items that are durable, multipurpose, and lightweight. Imagination may be the largest part of your kit. It can replace many of the items in a kit. Combined with the will to live, it can mean the difference between surviving to return home with honor or not returning at all.

Backpack:

You need a backpack to carry your stuff.

Shelter:

You need shelter. The order of needs in the wild are immediate health dangers, shelter, water, and eventually food. Tents are the traditional answer. You need rope and usually tent pegs and a tent pole. Your tent pole can double as your walking stick. Maybe even use a quarterstaff as your tent pole/walking stick.

Tarps can be effective even as rain shelter and weight much less. You need rope or guylines and either trees or stakes and pole.

Ultralight hammocks are even lighter. You can get bug nets and rainflies for your hammock. Again the walking stick/tent pole/quarterstaff idea. Maybe use your spear as a walking stick/tent pole. You need the guylines and probably pegs as well.

Sleeping:

You need protection while sleeping. A down filled quilt is light weight and compresses to small space and super good at maintaining body heat over the night.

A sleeping pad is a great luxury. Yes you can make leaf or moss beds or other alternatives using whatever you naturally find, depending on the kind of terrain.

Water:

You have to have water. A method to carry the water (such as waterskins). And a method for purifying found water, such as pot where you can boil the water.

Fire:

You need an easy method to start fires. Relying on two sticks is time consuming, heavy physical exertion, and requires access to sticks. Flint and steel plus a little bit of stored tinder (for when you can't easily find tinder in the wild).

Food:

You want some carried food, even if you plan on foraging in the wild. Or military foraging, which is known to the victims as looting and stealing.

Footwear:

You want high quality outdoor footwear. Probably the best boots you can find.

Hat:

You want a hat. Protection against sunburn and rain.

Bad Weather Gear:

You want foul weather gear. For whatever kind of foul weather is typical where you will be adventuring. Protection from rain, snow, storm, dust, blizzard, etc.

Light:

You want some method of creating light.

Personal Hygiene:

You want personal hygiene items. Toothbrush, toothpaste, soap.

Tools:

You want the minimal set of tools needed to handle everyday situations.

survival self-defense

Defense:

Defense: Defend yourself from any immediate threats.

Weapon System:

Prior to firearms, the most efficient weapon system has been spear, shield, helmet, and body armor.

Spear:

A spear is effective in the hands of an amateur. A spear is deadly in the hands of a skilled warrior.

Shield:

The shield is great is the starting point of defense in both one-on-one and mass combat.

Helmet:

Protecting the head keeps you alive.

survival first aid

First Aid:

First Aid: Stabilize any serious medical issues.

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Basic Survival Medicine

Foremost among the many problems that can compromise your survival ability are medical problems resulting from unplanned events, such as a forced landing or crash, extreme climates, ground combat, evasion, and illnesses contracted in captivity.

Many evaders and survivors have reported difficulty in treating injuries and illness due to the lack of training and medical supplies. For some, this led to capture or surrender.

Survivors have related feelings of apathy and helplessness because they could not treat themselves in this environment. The ability to treat yourself increases your morale and aids in your survival and eventual return to friendly forces.

One man with a fair amount of basic medical knowledge can make a difference in the lives of many. Without qualified medical personnel available, it is you who must know what to do to stay alive.

REQUIREMENTS FOR MAINTENANCE OF HEALTH

4-1. To survive, you need water and food. You must also have and apply high personal hygiene standards.

WATER

4-2. Your body loses water through normal body processes (sweating, urinating, and defecating). During average daily exertion when the atmospheric temperature is 20 degrees Celsius (68 degrees Fahrenheit [F]), the average adult loses and therefore requires 2 to 3 liters of water daily. Other factors, such as heat exposure, cold exposure, intense activity, high altitude, burns, or illness, can cause your body to lose more water. You must replace this water.

4-3. Dehydration results from inadequate replacement of lost body fluids. It decreases your efficiency and, if you are injured, it increases your susceptibility to

severe shock. Consider the following results of body fluid loss:

- A 5-percent loss results in thirst, irritability, nausea, and weakness.
- A 10-percent loss results in dizziness, headache, inability to walk, and a tingling sensation in the limbs.
- A 15-percent loss results in dim vision, painful urination, swollen tongue, deafness, and a numb feeling in the skin.
- A loss greater than 15 percent may result in death.

4-4. The most common signs and symptoms of dehydration are—

- Dark urine with a very strong odor.
- Low urine output.
- Dark, sunken eyes.
- Fatigue.
- Emotional instability.
- Loss of skin elasticity.
- Delayed capillary refill in fingernail beds.
- Trench line down center of tongue.
- Thirst. (Last on the list because you are already 2-percent dehydrated by the time you crave fluids.)

4-5. You should replace the water as you lose it. Trying to make up a deficit is difficult in a survival situation, and thirst is not a sign of how much water you need.

4-6. Most people cannot comfortably drink more than 1 liter of water at a time. So, even when not thirsty, drink small amounts of water at regular intervals each hour to prevent dehydration.

4-7. If you are under physical and mental stress or subject to severe conditions, increase your water intake. Drink enough liquids to maintain a urine output of at least 0.5 liters every 24 hours.

4-8. In any situation where food intake is low, drink 6 to 8 liters of water per day. In an extreme climate, especially an arid one, the average person can lose 2.5 to 3.5 liters of water **per hour**. In this type of climate, you should drink 8 to 12 ounces of

water every 30 minutes. It is better to regulate water loss through work or rest cycles because overhydration can occur if water intake exceed 1 1/2 quarts per hour. Overhydration can cause low serum sodium levels resulting in cerebral and pulmonary edema, which can lead to death.

4-9. With the loss of water there is also a loss of electrolytes (body salts). The average diet can usually keep up with these losses but in an extreme situation or illness, additional sources need to be provided. You should maintain an intake of carbohydrates and other necessary electrolytes.

4-10. Of all the physical problems encountered in a survival situation, the loss of water is the most preventable. The following are basic guidelines for the prevention of dehydration:

- *Always drink water when eating.* Water is used and consumed as a part of the digestion process and can lead to dehydration.
- *Acclimatize.* The body performs more efficiently in extreme conditions when acclimatized.
- *Conserve sweat, not water.* Limit sweat-producing activities but drink water.
- *Ration water.* Until you find a suitable source, ration your sweat, not your water. Limit activity and heat gain or loss.

4-11. You can estimate fluid loss by several means. A field dressing holds about 0.25 liters (1/4 canteen) of fluid. A soaked T-shirt holds 0.5 to 0.75 liters.

4-12. You can also use the pulse and breathing rate to estimate fluid loss. Use the following as a guide:

- With a 0.75-liter loss the wrist pulse rate will be under 100 beats per minute and the breathing rate 12 to 20 breaths per minute.
- With a 0.75- to 1.5-liter loss the pulse rate will be 100 to 120 beats per minute and 20 to 30 breaths per minute.
- With a 1.5- to 2-liter loss the pulse rate will be 120 to 140 beats per minute and 30 to 40 breaths per minute. Vital signs above these rates require more advanced care.

FOOD

4-13. Although you can live several weeks without food, you need an adequate amount to stay healthy. Without food your mental and physical capabilities will deteriorate rapidly and you will become weak. Food provides energy and replenishes the substances that your body burns. Food provides vitamins, minerals,

salts, and other elements essential to good health. Possibly more important, it helps morale.

4-14. The three basic sources of food are plants, animals (including fish), and issued rations. In varying degrees, both provide the calories, carbohydrates, fats, and proteins needed for normal daily body functions. You should use rations to augment plant and animal foods, which will extend and help maintain a balanced diet.

4-15. Calories are a measure of heat and potential energy. The average person needs 2,000 calories per day to function at a minimum level. An adequate amount of carbohydrates, fats, and proteins without an adequate caloric intake will lead to starvation and cannibalism of the body's own tissue for energy.

Plants

4-16. Plant foods provide carbohydrates—the main source of energy. Many plants provide enough protein to keep the body at normal efficiency. Although plants may not provide a balanced diet, they will sustain you even in the arctic, where meat's heat-producing qualities are normally essential. Many plant foods such as nuts and seeds will give you enough protein and oils for normal efficiency. Roots, green vegetables, and plant foods containing natural sugar will provide calories and carbohydrates that give the body natural energy.

4-17. The food value of plants becomes more and more important if you are eluding the enemy or if you are in an area where wildlife is scarce. For instance—

- You can dry plants by wind, air, sun, or fire. This retards spoilage so that you can store or carry the plant food with you to use when needed.
- You can obtain plants more easily and more quietly than meat. This is extremely important when the enemy is near.

Animals

4-18. Meat is more nourishing than plant food. In fact, it may even be more readily available in some places. However, to get meat, you need to know the habits of and how to capture the various wildlife.

4-19. To satisfy your immediate food needs, first seek the more abundant and more easily obtained wildlife, such as insects, crustaceans, mollusks, fish, and reptiles. These can satisfy your immediate hunger while you are preparing traps and snares for larger game.

PERSONAL HYGIENE

4-20. In any situation, cleanliness is an important factor in preventing infection and

disease. It becomes even more important in a survival situation. Poor hygiene can reduce your chances of survival.

4-21. A daily shower with hot water and soap is ideal, but you can stay clean without this luxury. Use a cloth and soapy water to wash yourself. Pay special attention to the feet, armpits, crotch, hands, and hair as these are prime areas for infestation and infection. If water is scarce, take an “airâ” bath. Remove as much of your clothing as practical and expose your body to the sun and air for at least 1 hour. Be careful not to sunburn.

4-22. If you don't have soap, use ashes or sand, or make soap from animal fat and wood ashes if your situation allows. To make soap—

- Extract grease from animal fat by cutting the fat into small pieces and cooking it in a pot.
- Add enough water to the pot to keep the fat from sticking as it cooks.
- Cook the fat slowly, stirring frequently.
- After the fat is rendered, pour the grease into a container to harden.
- Place ashes in a container with a spout near the bottom.
- Pour water over the ashes and collect the liquid that drips out of the spout in a separate container. This liquid is the potash or lye.

4-23. Another way to get the lye is to pour the slurry (the mixture of ashes and water) through a straining cloth.

- In a cooking pot, mix two parts grease to one part lye.
- Place this mixture over a fire and boil it until it thickens.

After the mixture (the soap) cools, you can use it in the semiliquid state directly from the pot. You can also pour it into a pan, allow it to harden, and cut it into bars for later use.

Keep Your Hands Clean

4-24. Germs on your hands can infect food and wounds. Wash your hands after handling any material that is likely to carry germs, after urinating or defecating, after caring for the sick, and before handling any food, food utensils, or drinking water. Keep your fingernails closely trimmed and clean, and keep your fingers out of your mouth.

Keep Your Hair Clean

4-25. Your hair can become a haven for bacteria or fleas, lice, and other parasites. Keeping your hair clean, combed, and trimmed helps you avoid this danger.

Keep Your Clothing Clean

4-26. Keep your clothing and bedding as clean as possible to reduce the chances of skin infection or parasitic infestation. Clean your outer clothing whenever it becomes soiled. Wear clean underclothing and socks each day. If water is scarce, “airâ” clean your clothing by shaking, airing, and sunning it for 2 hours. If you are using a sleeping bag, turn it inside out after each use, fluff it, and air it.

Keep Your Teeth Clean

4-27. Thoroughly clean your mouth and teeth with a toothbrush at least once each day. If you don't have a toothbrush, make a chewing stick. Find a twig about 20 centimeters (cm) (8 inches) long and 1 centimeter (1/3 inch) wide. Chew one end of the stick to separate the fibers. Then brush your teeth thoroughly. Another way is to wrap a clean strip of cloth around your fingers and rub your teeth with it to wipe away food particles. You can also brush your teeth with small amounts of sand, baking soda, salt, or soap. Rinse your mouth with water, salt water, or willow bark tea. Also, flossing your teeth with string or fiber helps oral hygiene.

4-28. If you have cavities, you can make temporary fillings by placing candle wax, tobacco, hot pepper, toothpaste or powder, or portions of a gingerroot into the cavity. Make sure you clean the cavity by rinsing or picking the particles out of the cavity before placing a filling in the cavity.

Take Care of Your Feet

4-29. To prevent serious foot problems, break in your shoes before wearing them on any mission. Wash and massage your feet daily. Trim your toenails straight across. Wear an insole and the proper size of dry socks. Powder and check your feet daily for blisters.

4-30. If you get a small blister, do not open it. An intact blister is safe from infection. Apply a padding material around the blister to relieve pressure and reduce friction. If the blister bursts, treat it as an open wound. Clean and dress it daily and pad around it. Leave large blisters intact. To avoid having the blister burst or tear under pressure and cause a painful and open sore, do the following:

- Obtain a sewing-type needle and a clean or sterilized thread.
- Run the needle and thread through the blister after cleaning the blister.
- Detach the needle and leave both ends of the thread hanging out of the blister.

The thread will absorb the liquid inside. This reduces the size of the hole and ensures that the hole does not close up.

- Pad around the blister.

Get Sufficient Rest

4-31. You need a certain amount of rest to keep going. Plan for regular rest periods of at least 10 minutes per hour during your daily activities. Learn to make yourself comfortable under less-than-ideal conditions. A change from mental to physical activity or vice versa can be refreshing when time or situation does not permit total relaxation.

Keep Campsite Clean

4-32. Do not soil the ground in the campsite area with urine or feces. Use latrines, if available. When latrines are not available, dig “cat holes” and cover the waste. Collect drinking water upstream from the campsite. Purify all water.

MEDICAL EMERGENCIES

4-33. Medical problems and emergencies you may face include breathing problems, severe bleeding, and shock. The following paragraphs explain each of these problems and what you can expect if they occur.

BREATHING PROBLEMS

4-34. Any one of the following can cause airway obstruction, resulting in stopped breathing:

- Foreign matter in mouth of throat that obstructs the opening to the trachea.
- Face or neck injuries.
- Inflammation and swelling of mouth and throat caused by inhaling smoke, flames, and irritating vapors or by an allergic reaction.
- “Kink” in the throat (caused by the neck bent forward so that the chin rests upon the chest).
- Tongue blocks passage of air to the lungs upon unconsciousness. When an individual is unconscious, the muscles of the lower jaw and tongue relax as the neck drops forward, causing the lower jaw to sag and the tongue to drop back and block the passage of air.

SEVERE BLEEDING

4-35. Severe bleeding from any major blood vessel in the body is extremely dangerous. The loss of 1 liter of blood will produce moderate symptoms of shock. The loss of 2 liters will produce a severe state of shock that places the body in extreme danger. The loss of 3 liters is usually fatal.

SHOCK

4-36. Shock (acute stress reaction) is not a disease in itself. It is a clinical condition characterized by symptoms that arise when cardiac output is insufficient to fill the arteries with blood under enough pressure to provide an adequate blood supply to the organs and tissues.

LIFESAVING STEPS

4-37. Control panic, both your own and the victim's. Reassure him and try to keep him quiet. Perform a rapid physical exam. Look for the cause of the injury and follow the ABCs of first aid. Start with the airway and breathing, but be discerning. In some cases, a person may die from arterial bleeding more quickly than from an airway obstruction. The following paragraphs describe how to treat airway, bleeding, and shock emergencies.

OPEN AIRWAY AND MAINTAIN

4-38. You can open an airway and maintain it by using the following steps:

- *Step 1.* You should check to see if the victim has a partial or complete airway obstruction. If he can cough or speak, allow him to clear the obstruction naturally. Stand by, reassure the victim, and be ready to clear his airway and perform mouth-to-mouth resuscitation should he become unconscious. If his airway is completely obstructed, administer abdominal thrusts until the obstruction is cleared.
- *Step 2.* Using a finger, quickly sweep the victim's mouth clear of any foreign objects, broken teeth, dentures, and sand.
- *Step 3.* Using the jaw thrust method, grasp the angles of the victim's lower jaw and lift with both hands, one on each side, moving the jaw forward. For stability, rest your elbows on the surface on which the victim is lying. If his lips are closed, gently open the lower lip with your thumb (Figure 4-1, page 4-10).

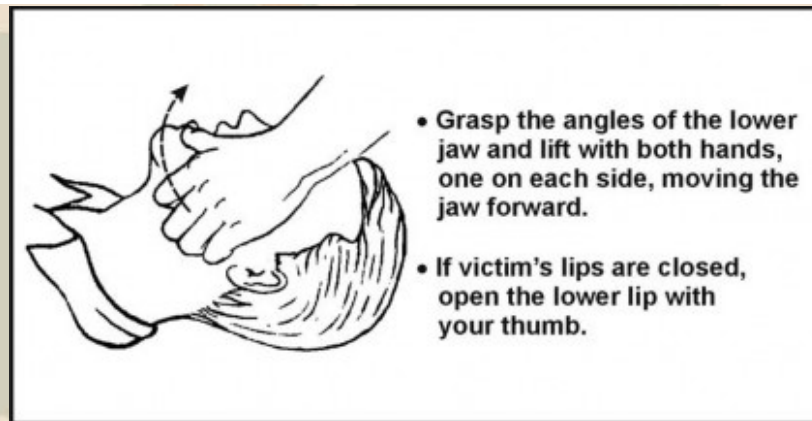


Figure 4-1. Jaw Thrust Method

- *Step 4.* With the victim's airway open, pinch his nose closed with your thumb and forefinger and blow two complete breaths into his lungs. Allow the lungs to deflate after the second inflation and perform the following:
 - **Look** for his chest to rise and fall.
 - **Listen** for escaping air during exhalation.
 - **Feel** for flow of air on your cheek.
- *Step 5.* If the forced breaths do not stimulate spontaneous breathing, maintain the victim's breathing by performing mouth-to-mouth resuscitation.
- *Step 6.* There is danger of the victim vomiting during mouth-to-mouth resuscitation. Check the victim's mouth periodically for vomit and clear as needed.

NOTE: Cardiopulmonary resuscitation (CPR) may be necessary after cleaning the airway, but only after major bleeding is under control. See FM 21-20, *Physical Fitness Training*, the American Heart Association manual, the Red Cross manual, or most other first aid books for detailed instructions on CPR.

CONTROL BLEEDING

4-39. In a survival situation, you must control serious bleeding immediately because replacement fluids normally are not available and the victim can die within a matter of minutes.

External bleeding falls into the following classifications (according to its source):

- *Arterial.* Blood vessels called arteries carry blood away from the heart and through the body. A cut artery issues *bright red* blood from the wound in *distinct spurts or pulses* that correspond to the rhythm of the heartbeat. Because the blood in the arteries is under high pressure, an individual can lose a large volume of

blood in a short period when damage to an artery of significant size occurs. Therefore, arterial bleeding is the most serious type of bleeding. If not controlled promptly, it can be fatal.

- *Venous*. Venous blood is blood that is returning to the heart through blood vessels called veins. A steady flow of *dark red, maroon, or bluish blood* characterizes bleeding from a vein. You can usually control venous bleeding more easily than arterial bleeding.
- *Capillary*. The capillaries are the extremely small vessels that connect the arteries with the veins. Capillary bleeding most commonly occurs in minor cuts and scrapes. This type of bleeding is not difficult to control.

4-40. You can control external bleeding by direct pressure, indirect (pressure points) pressure, elevation, digital ligation, or tourniquet. Each method is explained below.

Direct Pressure

4-41. The most effective way to control external bleeding is by applying pressure directly over the wound. This pressure must not only be firm enough to stop the bleeding, but it must also be maintained long enough to “seal off” the damaged surface.

4-42. If bleeding continues after having applied direct pressure for 30 minutes, apply a pressure dressing. This dressing consists of a thick dressing of gauze or other suitable material applied directly over the wound and held in place with a tightly wrapped bandage (Figure 4-2, page 4-12). It should be tighter than an ordinary compression bandage but not so tight that it impairs circulation to the rest of the limb. Once you apply the dressing, **do not remove it**, even when the dressing becomes blood soaked.

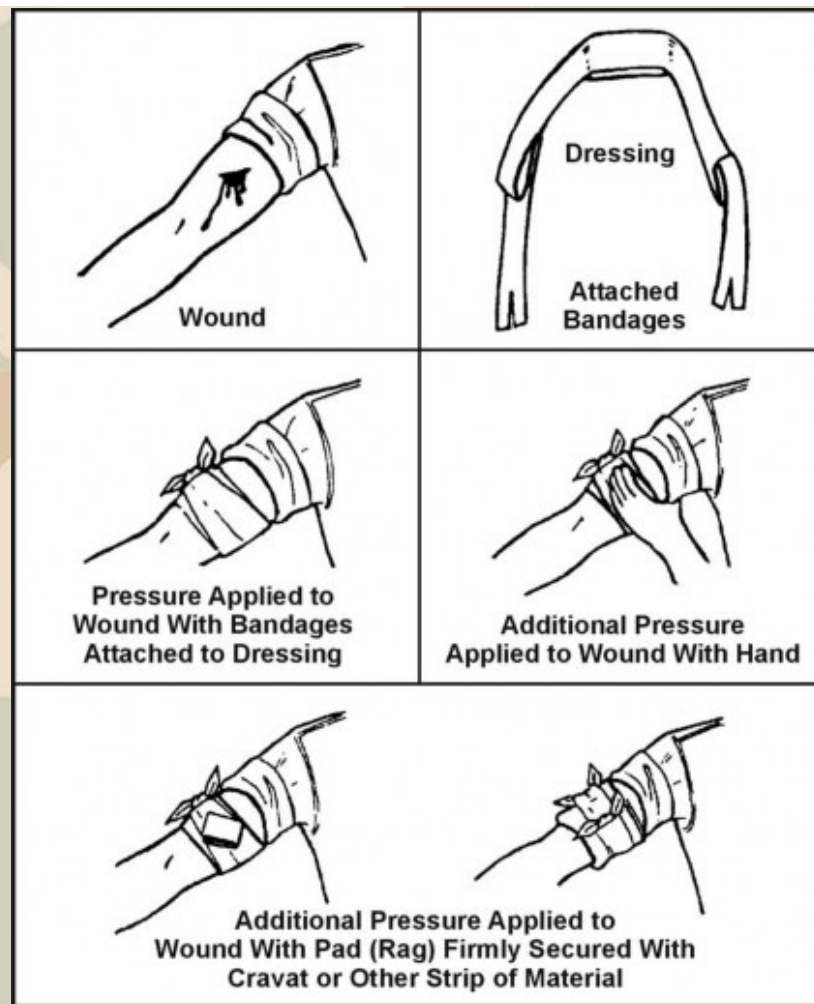


Figure 4-2. Application of a Pressure Dressing

4-43. Leave the pressure dressing in place for 1 or 2 days, after which you can remove and replace it with a smaller dressing. In the long-term survival environment, make fresh, daily dressing changes and inspect for signs of infection.

Elevation

4-44. Raising an injured extremity as high as possible above the heart's level slows blood loss by aiding the return of blood to the heart and lowering the blood pressure at the wound. However, elevation alone will not control bleeding entirely; you must also apply direct pressure over the wound. When treating a snakebite, be sure to keep the extremity **lower** than the heart.

Pressure Points

4-45. A pressure point is a location where the main artery to the wound lies near the surface of the skin or where the artery passes directly over a bony prominence (Figure 4-3). You can use digital pressure on a pressure point to slow arterial bleeding until the application of a pressure dressing. Pressure point control is not as effective for controlling bleeding as direct pressure exerted on the wound. It is rare when a single major compressible artery supplies a damaged vessel.

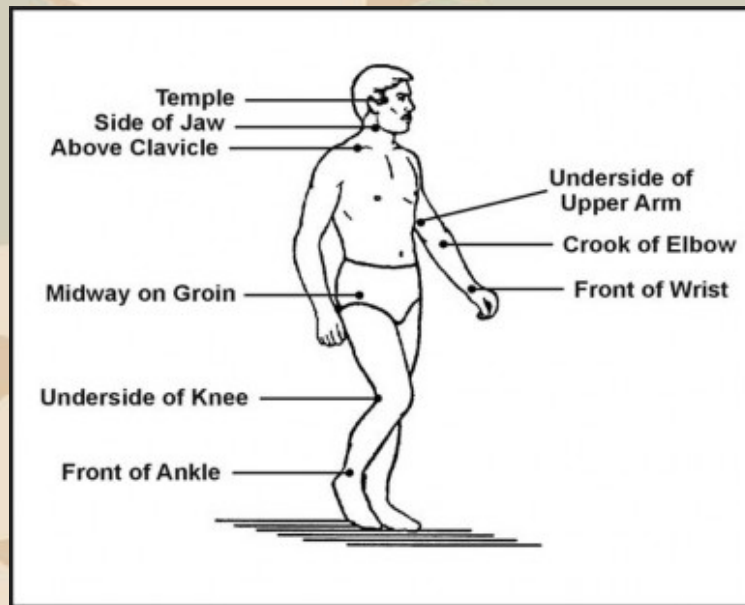


Figure 4-3. Pressure Points

4-46. If you cannot remember the exact location of the pressure points, follow this rule: Apply pressure at the end of the joint just above the injured area. On hands, feet, and head, this will be the wrist, ankle, and neck, respectively.

WARNING

Use caution when applying pressure to the neck. Too much pressure for too long may cause unconsciousness or death. Never place a tourniquet around the neck.

4-47. Maintain pressure points by placing a round stick in the joint, bending the joint over the stick, and then keeping it tightly bent by lashing. By using this method to maintain pressure, it frees your hands to work in other areas.

Digital Ligation

4-48. You can stop major bleeding immediately or slow it down by applying pressure with a finger or two on the bleeding end of the vein or artery. Maintain the pressure until the bleeding stops or slows down enough to apply a pressure bandage, elevation, and so forth.

Tourniquet

4-49. Use a tourniquet only when direct pressure over the bleeding point and all other methods did not control the bleeding. If you leave a tourniquet in place too long, the damage to the tissues can progress to gangrene, with a loss of the limb later. An improperly applied tourniquet can also cause permanent damage to nerves and other tissues at the site of the constriction. If you must use a tourniquet, place it

around the extremity, between the wound and the heart, 5 to 10 centimeters (2 to 4 inches) above the wound site. Never place it directly over the wound or a fracture. Figure 4-4, page 4-15, explains how to apply a tourniquet.

4-50. After you secure the tourniquet, clean and bandage the wound. A lone survivor **does not** remove or release an applied tourniquet. However, in a buddy system, the buddy can release the tourniquet pressure every 10 to 15 minutes for 1 or 2 minutes to let blood flow to the rest of the extremity to prevent limb loss.

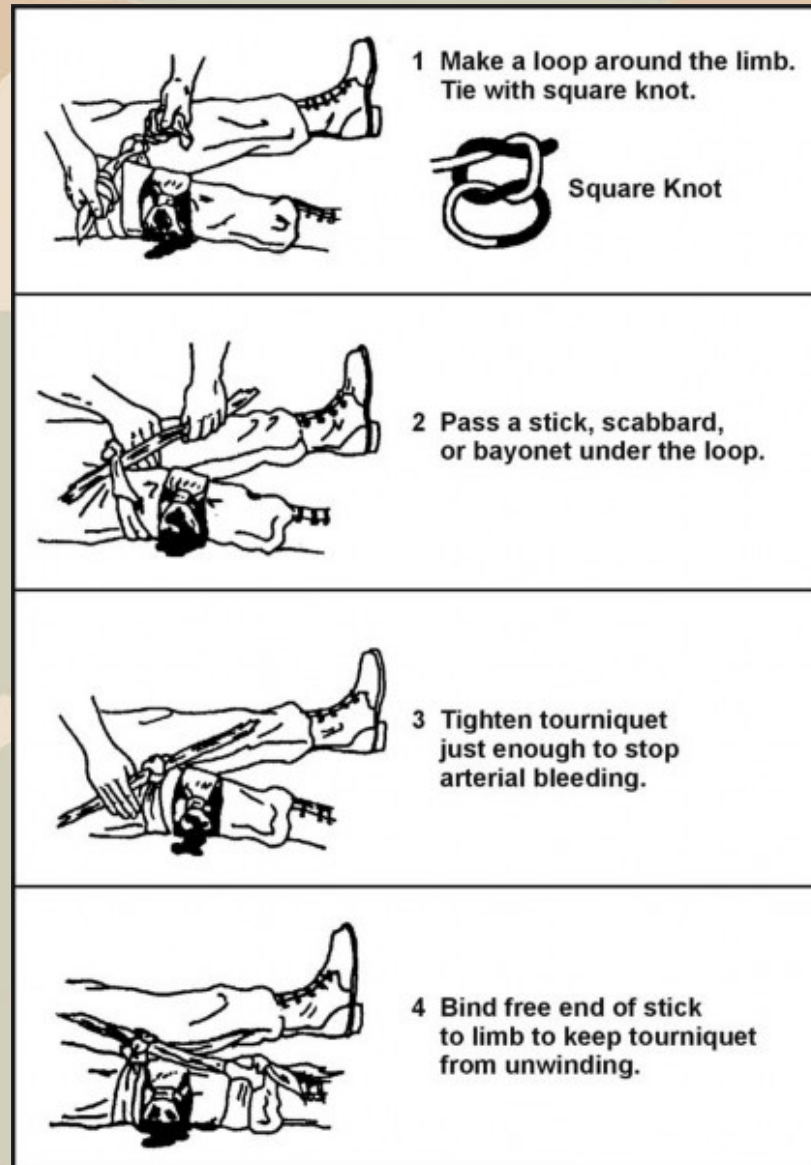


Figure 4-4. Application of Tourniquet

PREVENT AND TREAT SHOCK

4-51. Anticipate shock in all injured personnel. Treat all injured persons as follows, regardless of what symptoms appear (Figure 4-5, page 4-17):

- If the victim is conscious, place him on a level surface with the lower extremities elevated 15 to 20 centimeters (6 to 8 inches).

- If the victim is unconscious, place him on his side or abdomen with his head turned to one side to prevent choking on vomit, blood, or other fluids.
- If you are unsure of the best position, place the victim perfectly flat. Once the victim is in a shock position, do not move him.
- Maintain body heat by insulating the victim from the surroundings and, in some instances, applying external heat.
- If wet, remove all the victim's wet clothing as soon as possible and replace with dry clothing.
- Improvise a shelter to insulate the victim from the weather.
- Use warm liquids or foods, a prewarmed sleeping bag, another person, warmed water in canteens, hot rocks wrapped in clothing, or fires on either side of the victim to provide external warmth.
- If the victim is conscious, slowly administer small doses of a warm salt or sugar solution, if available.
- If the victim is unconscious or has abdominal wounds, do not give fluids by mouth.
- Have the victim rest for at least 24 hours.
- If you are a lone survivor, lie in a depression in the ground, behind a tree, or any other place out of the weather, with your head lower than your feet.
- If you are with a buddy, reassess your patient constantly.

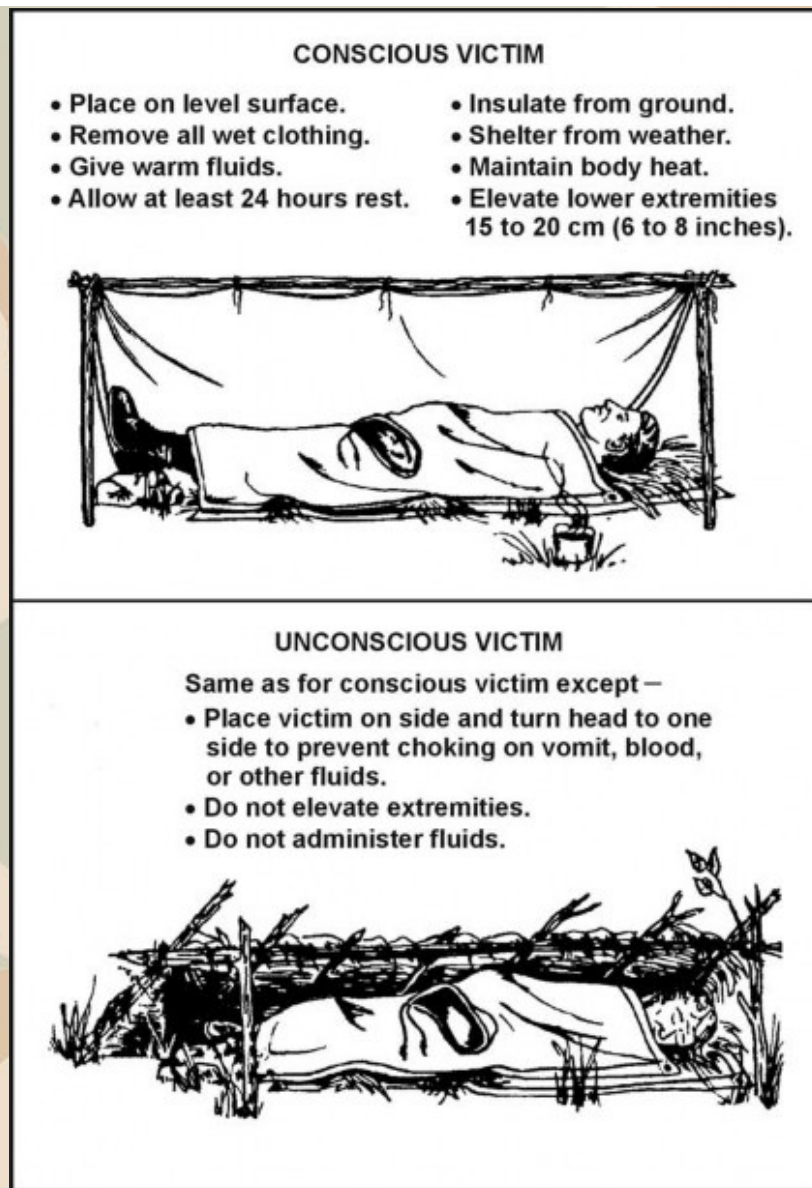


Figure 4-5. Treatment for Shock

BONE AND JOINT INJURY

4-52. You could face bone and joint injuries that include fractures, dislocations, and sprains. Follow the steps explained below for each injury.

FRACTURES

4-53. There are basically two types of fractures: open and closed. With an open (or compound) fracture, the bone protrudes through the skin and complicates the actual fracture with an open wound. Any bone protruding from the wound should be cleaned with an antiseptic and kept moist. You should splint the injured area and continually monitor blood flow past the injury. Only reposition the break if there is no blood flow.

4-54. The closed fracture has no open wounds. Follow the guidelines for

immobilization and splint the fracture.

4-55. The signs and symptoms of a fracture are pain, tenderness, discoloration, swelling deformity, loss of function, and grating (a sound or feeling that occurs when broken bone ends rub together).

4-56. The dangers with a fracture are the severing or the compression of a nerve or blood vessel at the site of fracture. For this reason minimum manipulation should be done, and only very cautiously. If you notice the area below the break becoming numb, swollen, cool to the touch, or turning pale, and the victim showing signs of shock, a major vessel may have been severed. You must control this internal bleeding. Reset the fracture and treat the victim for shock and replace lost fluids.

4-57. Often you must maintain traction during the splinting and healing process. You can effectively pull smaller bones such as the arm or lower leg by hand. You can create traction by wedging a hand or foot in the V-notch of a tree and pushing against the tree with the other extremity. You can then splint the break.

4-58. Very strong muscles hold a broken thighbone (femur) in place making it difficult to maintain traction during healing. You can make an improvised traction splint using natural material (Figure 4-6, page 4-19) as explained below.

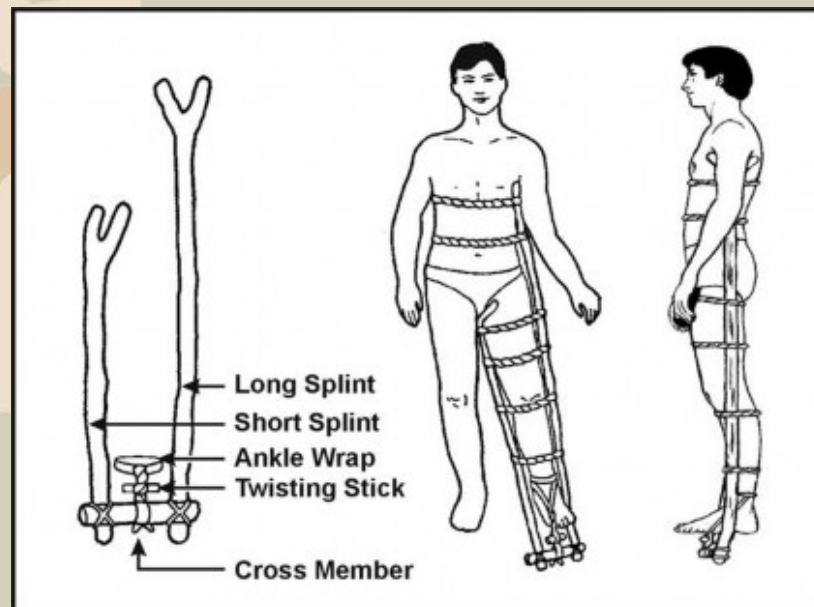


Figure 4-6. Improvised Traction Splint

- Get two forked branches or saplings at least 5 centimeters (2 inches) in diameter. Measure one from the patient's armpit to 20 to 30 centimeters (8 to 12 inches) past his unbroken leg. Measure the other from the groin to 20 to 30 centimeters (8 to 12 inches) past the unbroken leg. Ensure that both extend an equal distance beyond the end of the leg.
- Pad the two splints. Notch the ends without forks and lash a 20- to 30-centimeter (8- to 12-inch) cross member made from a 5-centimeter (2-inch)

diameter branch between them.

- Using available material (vines, cloth, rawhide), tie the splint around the upper portion of the body and down the length of the broken leg. Follow the splinting guidelines.
- With available material, fashion a wrap that will extend around the ankle, with the two free ends tied to the cross member.
- Place a 10- by 2.5-centimeter (4- by 1-inch) stick in the middle of the free ends of the ankle wrap between the cross member and the foot. Using the stick, twist the material to make the traction easier.
- Continue twisting until the broken leg is as long or slightly longer than the unbroken leg.
- Lash the stick to maintain traction.

NOTE: Over time, you may lose traction because the material weakened. Check the traction periodically. If you must change or repair the splint, maintain the traction manually for a short time.

DISLOCATIONS

4-59. Dislocations are the separations of bone joints causing the bones to go out of proper alignment. These misalignments can be extremely painful and can cause an impairment of nerve or circulatory function below the area affected. You must place these joints back into alignment as quickly as possible.

4-60. Signs and symptoms of dislocations are joint pain, tenderness, swelling, discoloration, limited range of motion, and deformity of the joint. You treat dislocations by reduction, immobilization, and rehabilitation.

4-61. Reduction or “setting” is placing the bones back into their proper alignment. You can use several methods, but manual traction or the use of weights to pull the bones are the safest and easiest. Once performed, reduction decreases the victim’s pain and allows for normal function and circulation. Without an X ray, you can judge proper alignment by the look and feel of the joint and by comparing it to the joint on the opposite side.

4-62. Immobilization is nothing more than splinting the dislocation after reduction. You can use any field-expedient material for a splint or you can splint an extremity to the body. The basic guidelines for splinting are as follows:

- Splint above and below the fracture site.
- Pad splints to reduce discomfort.

- Check circulation below the fracture after making each tie on the splint.

4-63. To rehabilitate the dislocation, remove the splints after 7 to 14 days. Gradually use the injured joint until fully healed.

SPRAINS

4-64. The accidental overstretching of a tendon or ligament causes sprains. The signs and symptoms are pain, swelling, tenderness, and discoloration (black and blue).

4-65. When treating sprains, you should follow the letters in RICE as defined below:

- R—Rest injured area.
- I—Ice for 24 to 48 hours.
- C—Compression-wrap or splint to help stabilize. If possible, leave the boot on a sprained ankle unless circulation is compromised.
- E—Elevate the affected area.

NOTE: Ice is preferred for a sprain but cold spring water may be more easily obtained in a survival situation.

BITES AND STINGS

4-66. Insects and related pests are hazards in a survival situation. They not only cause irritations, but they are often carriers of diseases that cause severe allergic reactions in some individuals. In many parts of the world you will be exposed to serious, even fatal, diseases not encountered in the United States.

- Ticks can carry and transmit diseases, such as Rocky Mountain spotted fever common in many parts of the United States. Ticks also transmit Lyme disease.
- Mosquitoes may carry malaria, dengue, and many other diseases.
- Flies can spread disease from contact with infectious sources. They are causes of sleeping sickness, typhoid, cholera, and dysentery.
- Fleas can transmit plague.
- Lice can transmit typhus and relapsing fever.

4-67. The best way to avoid the complications of insect bites and stings is to keep immunizations (including booster shots) up-to-date, avoid insect-infested areas, use netting and insect repellent, and wear all clothing properly.

4-68. If you are bitten or stung, do not scratch the bite or sting; it might become infected. Inspect your body at least once a day to ensure there are no insects attached to you. If you find ticks attached to your body, cover them with a substance (such as petroleum jelly, heavy oil, or tree sap) that will cut off their air supply. Without air, the tick releases its hold, and you can remove it. Take care to remove the whole tick. Use tweezers if you have them. Grasp the tick where the mouthparts are attached to the skin. Do not squeeze the tick's body. Wash your hands after touching the tick. Clean the tick wound daily until healed.

TREATMENT

4-69. It is impossible to list the treatment of all the different types of bites and stings. However, you can generally treat bites and stings as follows:

- If antibiotics are available for your use, become familiar with them before deployment and use them.
- Predeployment immunizations can prevent most of the common diseases carried by mosquitoes and some carried by flies.
- The common fly-borne diseases are usually treatable with penicillins or erythromycin.
- Most tick-, flea-, louse-, and mite-borne diseases are treatable with tetracycline.
- Most antibiotics come in 250 milligram (mg) or 500 mg tablets. If you cannot remember the exact dose rate to treat a disease, 2 tablets, 4 times a day, for 10 to 14 days will usually kill any bacteria.

BEE AND WASP STINGS

4-70. If stung by a bee, immediately remove the stinger and venom sac, if attached, by scraping with a fingernail or a knife blade. Do not squeeze or grasp the stinger or venom sac, as squeezing will force more venom into the wound. Wash the sting site thoroughly with soap and water to lessen the chance of a secondary infection.

4-71. If you know or suspect that you are allergic to insect stings, always carry an insect sting kit with you.

4-72. Relieve the itching and discomfort caused by insect bites by applying—

- Cold compresses.

- A cooling paste of mud and ashes.
- Sap from dandelions.
- Coconut meat.
- Crushed cloves of garlic.
- Onion.

SPIDER BITES AND SCORPION STINGS

4-73. The black widow spider is identified by a red hourglass on its abdomen. Only the female bites, and it has a neurotoxic venom. The initial pain is not severe, but severe local pain rapidly develops. The pain gradually spreads over the entire body and settles in the abdomen and legs. Abdominal cramps and progressive nausea, vomiting, and a rash may occur. Weakness, tremors, sweating, and salivation may occur. Anaphylactic reactions can occur. Symptoms may worsen for the next three days and then begin to subside for the next week. Treat for shock. Be ready to perform CPR. Clean and dress the bite area to reduce the risk of infection. An antivenin is available.

4-74. The funnelweb spider is a large brown or gray spider found in Australia. The symptoms and the treatment for its bite are as for the black widow spider.

4-75. The brown house spider or brown recluse spider is a small, light brown spider identified by a dark brown violin on its back. There is no pain, or so little pain, that usually a victim is not aware of the bite. Within a few hours a painful red area with a mottled cyanotic center appears. Necrosis does not occur in all bites, but usually in 3 to 4 days, a star-shaped, firm area of deep purple discoloration appears at the bite site. The area turns dark and mummified in a week or two. The margins separate and the scab falls off, leaving an open ulcer. Secondary infection and regional swollen lymph glands usually become visible at this stage. The outstanding characteristic of the brown recluse bite is an ulcer that does not heal but persists for weeks or months. In addition to the ulcer, there is often a systemic reaction that is serious and may lead to death. Reactions (fever, chills, joint pain, vomiting, and a generalized rash) occur chiefly in children or debilitated persons.

4-76. Tarantulas are large, hairy spiders found mainly in the tropics. Most do not inject venom, but some South American species do. They have large fangs. If bitten, pain and bleeding are certain, and infection is likely. Treat a tarantula bite as for any open wound, and try to prevent infection. If symptoms of poisoning appear, treat as for the bite of the black widow spider.

4-77. Scorpions are all poisonous to a greater or lesser degree. There are two different reactions, depending on the species:

- Severe local reaction only, with pain and swelling around the area of the sting. Possible prickly sensation around the mouth and a thick-feeling tongue.
- Severe systemic reaction, with little or no visible local reaction. Local pain may be present. Systemic reaction includes respiratory difficulties, thick-feeling tongue, body spasms, drooling, gastric distention, double vision, blindness, involuntary rapid movement of the eyeballs, involuntary urination and defecation, and heart failure. Death is rare, occurring mainly in children and adults with high blood pressure or illnesses.

4-78. Treat scorpion stings as you would a black widow bite.

SNAKEBITES

4-79. The chance of a snakebite in a survival situation is rather small, if you are familiar with the various types of snakes and their habitats. However, it could happen and you should know how to treat a snakebite. Deaths from snakebites are rare. More than one-half of the snakebite victims have little or no poisoning, and only about one-quarter develop serious systemic poisoning. However, the chance of a snakebite in a survival situation can affect morale, and failure to take preventive measures or failure to treat a snakebite properly can result in needless tragedy.

4-80. The primary concern in the treatment of snakebite is to limit the amount of eventual tissue destruction around the bite area.

4-81. A bite wound, regardless of the type of animal that inflicted it, can become infected from bacteria in the animal's mouth. With nonpoisonous as well as poisonous snakebites, this local infection is responsible for a large part of the residual damage that results.

4-82. Snake venoms not only contain poisons that attack the victim's central nervous system (neurotoxins) and blood circulation (hemotoxins), but also digestive enzymes (cytotoxins) to aid in digesting their prey. These poisons can cause a very large area of tissue death, leaving a large open wound. This condition could lead to the need for eventual amputation if not treated.

4-83. Shock and panic in a person bitten by a snake can also affect the person's recovery. Excitement, hysteria, and panic can speed up the circulation, causing the body to absorb the toxin quickly. Signs of shock occur within the first 30 minutes after the bite.

4-84. Before you start treating a snakebite, determine whether the snake was poisonous or nonpoisonous. Bites from a nonpoisonous snake will show rows of teeth. Bites from a poisonous snake may have rows of teeth showing, but will have one or more distinctive puncture marks caused by fang penetration. Symptoms of a poisonous bite may be spontaneous bleeding from the nose and anus, blood in the

urine, pain at the site of the bite, and swelling at the site of the bite within a few minutes or up to 2 hours later.

4-85. Breathing difficulty, paralysis, weakness, twitching, and numbness are also signs of neurotoxic venoms. These signs usually appear 1.5 to 2 hours after the bite.

4-86. If you determine that a poisonous snake bit an individual, take the following steps:

- Reassure the victim and keep him still.
- Set up for shock and force fluids or give by intravenous (IV) means.
- Remove watches, rings, bracelets, or other constricting items.
- Clean the bite area.
- Maintain an airway (especially if bitten near the face or neck) and be prepared to administer mouth-to-mouth resuscitation or CPR.
- Use a constricting band between the wound and the heart.
- Immobilize the site.
- Remove the poison as soon as possible by using a mechanical suction device. Do not squeeze the site of the bite.

4-87. You should also remember four very important guidelines during the treatment of snakebites. **Do not**—

- Give the victim alcoholic beverages or tobacco products. Never give atropine! Give morphine or other central nervous system (CNS) depressors.
- Make any deep cuts at the bite site. Cutting opens capillaries that in turn open a direct route into the blood stream for venom and infection.

NOTE: If medical treatment is over 1 hour away, make an incision (no longer than 6 millimeters [1/4 inch] and no deeper than 3 millimeters [1/8 inch]) over each puncture, cutting just deep enough to enlarge the fang opening, but only through the first or second layer of skin. Place a suction cup over the bite so that you have a good vacuum seal. Suction the bite site 3 to 4 times. Suction for a **MINIMUM of 30 MINUTES**. Use mouth suction **only** as a last resort and only if you do not have open sores in your mouth. Spit the envenomed blood out and rinse your mouth with water. This method will draw out 25 to 30 percent of the venom.

- Put your hands on your face or rub your eyes, as venom may be on your hands. Venom may cause blindness.

- Break open the large blisters that form around the bite site.

4-88. After caring for the victim as described above, take the following actions to minimize local effects:

- If infection appears, keep the wound open and clean.
- Use heat after 24 to 48 hours to help prevent the spread of local infection. Heat also helps to draw out an infection.
- Keep the wound covered with a dry, sterile dressing.
- Have the victim drink large amounts of fluids until the infection is gone.

WOUNDS

4-89. An interruption of the skin's integrity characterizes wounds. These wounds could be open wounds, skin diseases, frostbite, trench foot, or burns.

OPEN WOUNDS

4-90. Open wounds are serious in a survival situation, not only because of tissue damage and blood loss, but also because they may become infected. Bacteria on the object that made the wound, on the individual's skin and clothing, or on other foreign material or dirt that touches the wound may cause infection.

4-91. By taking proper care of the wound you can reduce further contamination and promote healing. Clean the wound as soon as possible after it occurs by—

- Removing or cutting clothing away from the wound.
- Always looking for an exit wound if a sharp object, gunshot, or projectile caused a wound.
- Thoroughly cleaning the skin around the wound.
- Rinsing (not scrubbing) the wound with large amounts of water under pressure. You can use fresh urine if water is not available.

4-92. The “open treatment” method is the safest way to manage wounds in survival situations. Do not try to close any wound by suturing or similar procedures. Leave the wound open to allow the drainage of any pus resulting from infection. As long as the wound can drain, it generally will not become life-threatening, regardless of how unpleasant it looks or smells.

4-93. Cover the wound with a clean dressing. Place a bandage on the dressing to

hold it in place. Change the dressing daily to check for infection.

4-94. If a wound is gaping, you can bring the edges together with adhesive tape cut in the form of a “butterfly” or “dumbbell” (Figure 4-7). Use this method with extreme caution in the absence of antibiotics. You must always allow for proper drainage of the wound to avoid infection.

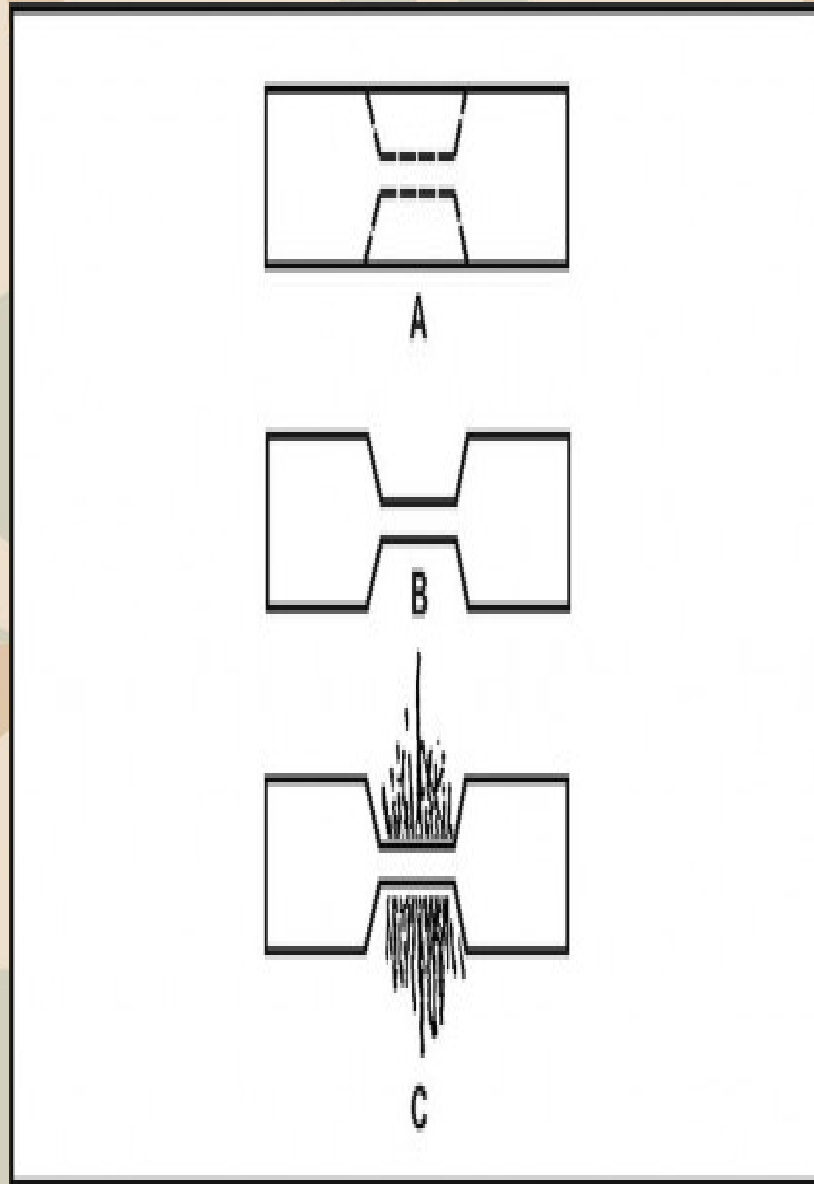


Figure 4-7. Butterfly Closure

4-95. In a survival situation, some degree of wound infection is almost inevitable. Pain, swelling, and redness around the wound, increased temperature, and pus in the wound or on the dressing indicate infection is present.

4-96. If the wound becomes infected, you should treat as follows:

- Place a warm, moist compress directly on the infected wound. Change the compress when it cools, keeping a warm compress on the wound for a total of 30 minutes. Apply the compresses three or four times daily.

- Drain the wound. Open and gently probe the infected wound with a sterile instrument.
- Dress and bandage the wound.
- Drink a lot of water.
- In the event of gunshot or other serious wounds, it may be better to rinse the wound out vigorously every day with the cleanest water available. If drinking water or methods to purify drinking water are limited, do not use your drinking water. Flush the wound forcefully daily until the wound is healed over. Your scar may be larger but your chances of infection are greatly reduced.
- Continue this treatment daily until all signs of infection have disappeared.

4-97. If you do not have antibiotics and the wound has become severely infected, does not heal, and ordinary debridement is impossible, consider maggot therapy as stated below, despite its hazards:

- Expose the wound to flies for one day and then cover it.
- Check daily for maggots.
- Once maggots develop, keep wound covered but check daily.
- Remove all maggots when they have cleaned out all dead tissue and before they start on healthy tissue. Increased pain and bright red blood in the wound indicate that the maggots have reached healthy tissue.
- Flush the wound repeatedly with sterile water or fresh urine to remove the maggots.
- Check the wound every 4 hours for several days to ensure all maggots have been removed.
- Bandage the wound and treat it as any other wound. It should heal normally.

SKIN DISEASES AND AILMENTS

4-98. Boils, fungal infections, and rashes rarely develop into a serious health problem. They cause discomfort and you should treat them as follows:

Boils

4-99. Apply warm compresses to bring the boil to a head. Another method that can be used to bring a boil to a head is the bottle suction method. Use an empty bottle

that has been boiled in water. Place the opening of the bottle over the boil and seal the skin forming an airtight environment that will create a vacuum. This method will draw the pus to the skin surface when applied correctly. Then open the boil using a sterile knife, wire, needle, or similar item. Thoroughly clean out the pus using soap and water. Cover the boil site, checking it periodically to ensure no further infection develops.

Fungal Infections

4-100. Keep the skin clean and dry, and expose the infected area to as much sunlight as possible. **Do not scratch** the affected area. During the Southeast Asian conflict, soldiers used antifungal powders, lye soap, chlorine bleach, alcohol, vinegar, concentrated salt water, and iodine to treat fungal infections with varying degrees of success. As with any “**unorthodox**” method of treatment, use these with **caution**.

Rashes

4-101. To treat a skin rash effectively, first determine what is causing it. This determination may be difficult even in the best of situations. Observe the following rules to treat rashes:

- If it is moist, keep it dry.
- If it is dry, keep it moist.
- Do not scratch it.

4-102. Use a compress of vinegar or tannic acid derived from tea or from boiling acorns or the bark of a hardwood tree to dry weeping rashes. Keep dry rashes moist by rubbing a small amount of rendered animal fat or grease on the affected area.

4-103. Remember, treat rashes as open wounds; clean and dress them daily. There are many substances available to survivors in the wild or in captivity for use as antiseptics to treat wounds. Follow the recommended guidance below:

- *Iodine tablets*. Use 5 to 15 tablets in a liter of water to produce a good rinse for wounds during healing.
- *Garlic*. Rub it on a wound or boil it to extract the oils and use the water to rinse the affected area.
- *Salt water*. Use 2 to 3 tablespoons per liter of water to kill bacteria.
- *Bee honey*. Use it straight or dissolved in water.

CAUTION

Unpasteurized honey has been known to contain botulinum, which affects young children mostly. Discontinue treatment if vomiting, double vision, fever, or muscular paralysis occur.

- *Sphagnum moss*. Found in boggy areas worldwide, it is a natural source of iodine. Use as a dressing.
- *Sugar*. Place directly on wound and remove thoroughly when it turns into a glazed and runny substance. Then reapply.
- *Syrup*. In extreme circumstances, some of the same benefits of honey and sugar can be realized with any high-sugar-content item.

NOTE: Again, use noncommercially prepared materials with caution.

BURNS

4-104. The following field treatment for burns relieves the pain somewhat, seems to help speed healing, and offers some protection against infection:

- First, stop the burning process. Put out the fire by removing clothing, dousing with water or sand, or by rolling on the ground. Cool the burning skin with ice or water. For burns caused by white phosphorous, pick out the white phosphorous with tweezers; do not douse with water.
- Soak dressings or clean rags for 10 minutes in a boiling tannic acid solution (obtained from tea, inner bark of hardwood trees, or acorns boiled in water).
- Cool the dressings or clean rags and apply over burns. Sugar and honey also work for burns with honey being especially effective at promoting new skin growth and stopping infections. Use both as you would in an open wound above.
- Treat as an open wound.
- Replace fluid loss. Fluid replacement can be achieved through oral (preferred) and intravenous routes (when resources are available). One alternate method through which rehydration can be achieved is through the rectal route. Fluids do not need to be sterile, only purified. A person can effectively absorb approximately 1 to 1.5 liters per hour by using a tube to deliver fluids into the rectal vault.
- Maintain airway.
- Treat for shock.

- Consider using morphine, unless the burns are near the face.

ENVIRONMENTAL INJURIES

4-105. Heatstroke, hypothermia, diarrhea, and intestinal parasites are environmental injuries you could face in a survival situation. Read and follow the guidance provided below.

HEATSTROKE

4-106. The breakdown of the body's heat regulatory system (body temperature more than 40.5 degrees C [105 degrees F]) causes a heatstroke. Other heat injuries, such as cramps or dehydration, do not always precede a heatstroke. Signs and symptoms of heatstroke are—

- Swollen, beet-red face.
- Reddened whites of eyes.
- Victim not sweating.
- Unconsciousness or delirium, which can cause pallor, a bluish color to lips and nail beds (cyanosis), and cool skin.

NOTE: By this time, the victim is in severe shock. Cool the victim as rapidly as possible. Cool him by dipping him in a cool stream. If one is not available, douse the victim with urine, water, or at the very least, apply cool wet compresses to all the joints, especially the neck, armpits, and crotch. Be sure to wet the victim's head. Heat loss through the scalp is great. Administer IVs and provide drinking fluids. You may fan the individual.

4-107. You can expect the following symptoms during cooling:

- Vomiting.
- Diarrhea.
- Struggling.
- Shivering.
- Shouting.
- Prolonged unconsciousness.
- Rebound heatstroke within 48 hours.

- Cardiac arrest; be ready to perform CPR.

NOTE: Treat for dehydration with lightly salted water.

CHILBLAINS

4-108. Frostnip begins as firm, cold and white or gray areas on the face, ears, and extremities that can blister or peel just like sunburn as late as 2 to 3 days after the injury. Frostnip, or chilblains as it is sometimes called, is the result of tissue exposure to freezing temperatures and is the beginning of frostbite. The water in and around the cells freezes, rupturing cell walls and thus damaging the tissue. Warming the affected area with hands or a warm object treats this injury. Wind chill plays a factor in this injury; preventative measures include layers of dry clothing and protection against wetness and wind.

TRENCH FOOT

4-109. Immersion or trench foot results from many hours or days of exposure to wet or damp conditions at a temperature just above freezing. The nerves and muscles sustain the main damage, but gangrene can occur. In extreme cases the flesh dies and it may become necessary to have the foot or leg amputated. The best prevention is to keep your feet dry. Carry extra socks with you in a waterproof packet. Dry wet socks against your body. Wash your feet daily and put on dry socks.

FROSTBITE

4-110. This injury results from frozen tissues. Frostbite extends to a depth below the skin. The tissues become solid and immovable. Your feet, hands, and exposed facial areas are particularly vulnerable to frostbite.

4-111. When with others, prevent frostbite by using the buddy system. Check your buddy's face often and make sure that he checks yours. If you are alone, periodically cover your nose and lower part of your face with your mittens.

4-112. Do not try to thaw the affected areas by placing them close to an open flame. Frostbitten tissue may be immersed in 37 to 42 degrees C (99 to 109 degrees F) water until thawed. (Water temperature can be determined with the inside wrist or baby formula method.) Dry the part and place it next to your skin to warm it at body temperature.

HYPOTHERMIA

4-113. It is defined as the body's failure to maintain an inner core temperature of 36 degrees C (97 degrees F). Exposure to cool or cold temperature over a short or long time can cause hypothermia. Dehydration and lack of food and rest predispose the survivor to hypothermia.

4-114. Immediate treatment is the key. Move the victim to the best shelter possible away from the wind, rain, and cold. Remove all wet clothes and get the victim into dry clothing. Replace lost fluids with warm fluids, and warm him in a sleeping bag using two people (if possible) providing skin-to-skin contact. If the victim is unable to drink warm fluids, rectal rehydration may be used.

DIARRHEA

4-115. A common, debilitating ailment caused by changing water and food, drinking contaminated water, eating spoiled food, becoming fatigued, and using dirty dishes. You can avoid most of these causes by practicing preventive medicine. However, if you get diarrhea and do not have antidiarrheal medicine, one of the following treatments may be effective:

- Limit your intake of fluids for 24 hours.
- Drink one cup of a strong tea solution every 2 hours until the diarrhea slows or stops. The tannic acid in the tea helps to control the diarrhea. Boil the inner bark of a hardwood tree for 2 hours or more to release the tannic acid.
- Make a solution of one handful of ground chalk, charcoal, or dried bones and treated water. If you have some apple pomace or the rinds of citrus fruit, add an equal portion to the mixture to make it more effective. Take 2 tablespoons of the solution every 2 hours until the diarrhea slows or stops.

INTESTINAL PARASITES

4-116. You can usually avoid worm infestations and other intestinal parasites if you take preventive measures. For example, never go barefoot. The most effective way to prevent intestinal parasites is to avoid uncooked meat, never eat raw vegetables contaminated by raw sewage, and try not to use human waste as a fertilizer. However, should you become infested and lack proper medicine, you can use home remedies. Keep in mind that these home remedies work on the principle of changing the environment of the gastrointestinal tract. The following are home remedies you could use:

- *Salt water.* Dissolve 4 tablespoons of salt in 1 liter of water and drink. Do not repeat this treatment.
- *Tobacco.* Eat 1 to 1 1/2 cigarettes or approximately 1 teaspoon (pinch) of smokeless tobacco. The nicotine in the tobacco will kill or stun the worms long enough for your system to pass them. If the infestation is severe, repeat the treatment in 24 to 48 hours, **but no sooner**.
- *Kerosene.* Drink 2 tablespoons of kerosene, **but no more**. If necessary, you can repeat this treatment in 24 to 48 hours. Be careful not to inhale the fumes.

They may cause lung irritation.

NOTE: Tobacco and kerosene treatment techniques are very dangerous, be careful.

- *Hot peppers.* Peppers are effective only if they are a steady part of your diet. You can eat them raw or put them in soups or rice and meat dishes. They create an environment that is prohibitive to parasitic attachment.
- *Garlic.* Chop or crush 4 cloves, mix with 1 glass of liquid, and drink daily for 3 weeks.

HERBAL MEDICINES

4-117. Our modern wonder drugs, laboratories, and equipment have obscured more primitive types of medicine involving determination, common sense, and a few simple treatments. However, in many areas of the world the people still depend on local “witch doctors” or healers to cure their ailments. Many of the herbs (plants) and treatments they use are as effective as the most modern medications available. In fact, many modern medications come from refined herbs.

WARNING

Use herbal medicines with extreme care, and only when you lack or have limited medical supplies. Some herbal medicines are dangerous and may cause further damage or even death. Chapter 9 explains some basic herbal medicine treatments.

survival shelter

Shelter:

Shelter: Create or find a shelter and then as quickly as possible move to or create a better shelter. Exposure to the elements can kill in a hurry. Under some conditions shelter may be a first need above fire and in some cases the reverse. The rule of threes claims that in extreme conditions (especially exposure to extreme heat or extreme cold)s you can live for about three hours without shelter.

Your shelter should protect you from wind and precipitation, insulate you from the ground, and avoid natural threats (such as flash floods, insect mounds, and cliffs). You want the shelter to be in a location that provides easy access to water, building materials, fire wood, and other basic survival supplies.

If you have a tent, look for a suitable location to set up your tent. If you are without a tent, you want to look for a somewhat sheltered location and build up an emergency shelter from materials found nearby.

Your shelter needs to protect you from the surrounding environment well enough to maintain a proper body temperature. The shelter should retain enough of your radiated body heat to keep you warm when you sleep. The shelter should shield you from wind, rain, snow, and other weather.



image by Alexandra A life without animals is not worth living from Pixabay

US Army Field Manual 3-05-70 **SURVIVAL** May 2002:

Shelters

A shelter can protect you from the sun, insects, wind, rain, snow, hot or cold temperatures, and enemy observation. It can give you a feeling of well-being and help you maintain your will to survive.

In some areas, your need for shelter may take precedence over your need for food and possibly even your need for water. For example, prolonged exposure to cold can cause excessive fatigue and weakness (exhaustion). An exhausted person may develop a “passive” outlook, thereby losing the will to survive.

Seek natural shelters or alter them to meet your needs, therefore, saving energy. A common error in making a shelter is to make it too large. A shelter must be large enough to protect you and small enough to contain your body heat, especially in cold climates.

PRIMARY SHELTER—UNIFORM

5-1. Your primary shelter in a survival situation will be your uniform. This point is true regardless of whether you are in a hot, cold, tropical, desert, or arctic situation. For your uniform to protect you, it must be in as good of a condition as possible and

be worn properly. We use the term COLDER which is addressed in Chapter 15 to remind us of what to do.

SHELTER SITE SELECTION

5-2. When you are in a survival situation and realize that shelter is a high priority, start looking for shelter as soon as possible. As you do so, remember what you will need at the site. Two requisites for shelter are that it must—

- Contain material to make the type of shelter you need.
- Be large enough and level enough for you to lie down comfortably.

5-3. You should focus on your tactical situation and your safety when considering these requisites. You must also consider whether the site—

- Provides concealment from enemy observation.
- Has camouflaged escape routes.
- Is suitable for signaling, if necessary.
- Provides protection against wild animals and rocks and dead trees that might fall.
- Is free from insects, reptiles, and poisonous plants.

5-4. You must remember the problems that could arise in your environment. For instance, avoid—

- Flash flood areas in foothills.
- Avalanche or rockslide areas in mountainous terrain.
- Sites near bodies of water that are below the high-water mark.

5-5. In some areas, the season of the year has a strong bearing on the site you select. Ideal sites for a shelter differ in winter and summer. During cold winter months you will want a site that will protect you from the cold and wind, but will have a source of fuel and water. During summer months in the same area you will want a source of water, but you will also want the site to be almost insect free.

5-6. When you are considering shelter site selection, remember the word BLISS and the following guidelines:

- B—Blend in with the surroundings.

- L—Low silhouette.
- I—Irregular shape.
- S—Small.
- Secluded location.

TYPES OF SHELTERS

5-7. When looking for a shelter site, keep in mind the type of shelter you need. However, you must also consider the questions below:

- How much time and effort will you need to build the shelter?
- Will the shelter adequately protect you from the elements (sun, wind, rain, snow)?
- Do you have the tools to build it? If not, can you make improvised tools?
- Do you have the type and amount of materials needed to build it?

5-8. To answer these questions, you need to know how to make various types of shelters and what materials you need to make them.

PONCHO LEAN-TO

5-9. It takes only a short time and minimal equipment to build this lean-to (Figure 5-1). You need a poncho, 2 to 3 meters (7 to 10 feet) of rope or parachute suspension line, three stakes about 30 centimeters (1 foot) long, and two trees or two poles 2 to 3 meters (7 to 10 feet) apart. Before selecting the trees you will use or the location of your poles, check the wind direction. Ensure that the back of your lean-to will be into the wind.

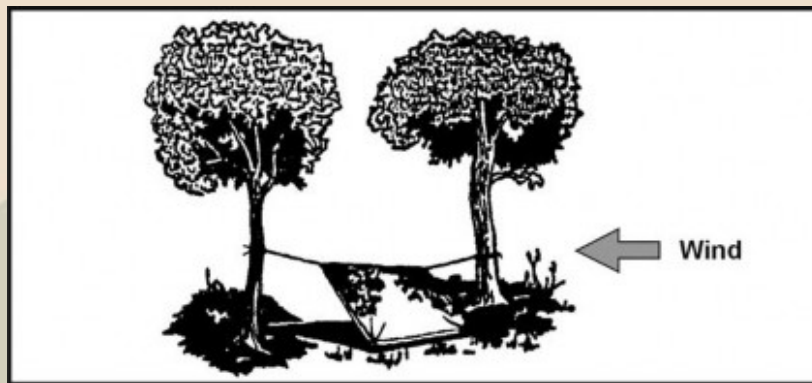


Figure 5-1. Poncho Lean-to

5-10. To make the lean-to, you should—

- Tie off the hood of the poncho. Pull the drawstring tight, roll the hood longways, fold it into thirds, and tie it off with the drawstring.
- Cut the rope in half. On one long side of the poncho, tie half of the rope to the corner grommet. Tie the other half to the other corner grommet.
- Attach a drip stick (about a 10-centimeter [4-inch] stick) to each rope about 2.5 centimeters (about 1 inch) from the grommet. These drip sticks will keep rainwater from running down the ropes into the lean-to. Tying strings (about 10 centimeters [4 inches] long) to each grommet along the poncho's top edge will allow the water to run to and down the line without dripping into the shelter.
- Tie the ropes about waist high on the trees. Use a round turn and two half hitches with a quick-release knot.
- Spread the poncho and anchor it to the ground, putting sharpened sticks through the grommets and into the ground.

5-11. If you plan to use the lean-to for more than one night, or you expect rain, make a center support for the lean-to. Make this support with a line. Attach one end of the line to the poncho hood and the other end to an overhanging branch. Make sure there is no slack in the line.

5-12. Another method is to place a stick upright under the center of the lean-to. However, this method will restrict your space and movements in the shelter.

5-13. For additional protection from wind and rain, place some brush, your rucksack, or other equipment at the sides of the lean-to.

5-14. To reduce heat loss to the ground, place some type of insulating material, such as leaves or pine needles, inside your lean-to.

NOTE: When at rest, you lose as much as 80 percent of your body heat to the ground.

5-15. To increase your security from enemy observation, lower the lean-to's silhouette by making two changes. First, secure the support lines to the trees at knee height (not at waist height) using two knee-high sticks in the two center grommets (sides of lean-to). Second, angle the poncho to the ground, securing it with sharpened sticks, as above.

PONCHO TENT

5-16. This tent (Figure 5-2) provides a low silhouette. It also protects you from the elements on two sides. It has, however, less usable space and observation area than a lean-to, decreasing your reaction time to enemy detection. To make this tent, you

need a poncho, two 1.5- to 2.5-meter (5- to 8-foot) ropes, six sharpened sticks about 30 centimeters (1 foot) long, and two trees 2 to 3 meters (7 to 10 feet) apart.



Figure 5-2. Poncho Tent Using Overhanging Branch

5-17. To make the tent, you should—

- Tie off the poncho hood in the same way as the poncho lean-to.
- Tie a 1.5- to 2.5-meter (5- to 8-foot) rope to the center grommet on each side of the poncho.
- Tie the other ends of these ropes at about knee height to two trees 2 to 3 meters (7 to 10 feet) apart and stretch the poncho tight.
- Draw one side of the poncho tight and secure it to the ground pushing sharpened sticks through the grommets.
- Follow the same procedure on the other side.

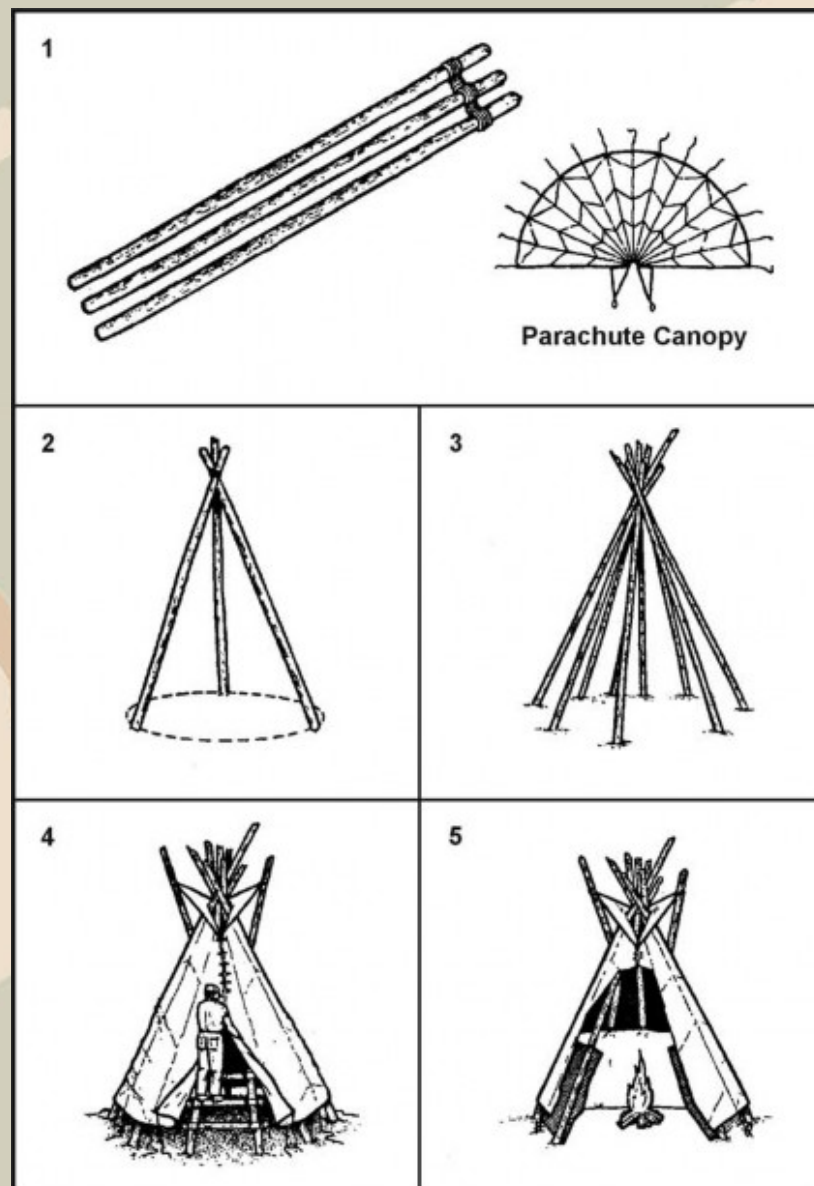
5-18. If you need a center support, use the same methods as for the poncho lean-to. Another center support is an A-frame set outside but over the center of the tent (Figure 5-3). Use two 90- to 120-centimeter-long (12- to 16-foot-long) sticks, one with a forked end, to form the A-frame. Tie the hood's drawstring to the A-frame to support the center of the tent.



Figure 5-3. Poncho Tent With A-Frame**THREE-POLE PARACHUTE TEPEE**

5-19. If you have a parachute and three poles and the tactical situation allows, make a parachute tepee. It is easy and takes very little time to make this tepee. It provides protection from the elements and can act as a signaling device by enhancing a small amount of light from a fire or candle. It is large enough to hold several people and their equipment and to allow sleeping, cooking, and storing firewood.

5-20. You can make this tepee (Figure 5-4, page 5-7) using parts of or a whole personnel main or reserve parachute canopy. If using a standard personnel parachute, you need three poles 3.5 to meters (12 to 15 feet) long and about 5 centimeters (2 inches) in diameter.

**Figure 5-4. Three-Pole Parachute Tepee**

5-21. To make this tepee, you should—

- Lay the poles on the ground and lash them together at one end.
- Stand the framework up and spread the poles to form a tripod.
- For more support, place additional poles against the tripod. Five or six additional poles work best, but do not lash them to the tripod.
- Determine the wind direction and locate the entrance 90 degrees or more from the mean wind direction.
- Lay out the parachute on the “backside” of the tripod and locate the bridle loop (nylon web loop) at the top (apex) of the canopy.
- Place the bridle loop over the top of a freestanding pole. Then place the pole back up against the tripod so that the canopy’s apex is at the same height as the lashing on the three poles.
- Wrap the canopy around one side of the tripod. The canopy should be of double thickness, as you are wrapping an entire parachute. You need only wrap half of the tripod, as the remainder of the canopy will encircle the tripod in the opposite direction.
- Construct the entrance by wrapping the folded edges of the canopy around two free-standing poles. You can then place the poles side by side to close the tepee’s entrance.
- Place all extra canopy underneath the tepee poles and inside to create a floor for the shelter.
- Leave a 30- to 50-centimeter (12- to 20-inch) opening at the top for ventilation if you intend to have a fire inside the tepee.

5-22. You need a 14-gore section (normally) of canopy, stakes, a stout center pole, and an inner core and needle to construct this tepee (Figure 5-5, page 5-9). You cut the suspension lines except for 40- to 45-centimeter (16- to 18-inch) lengths at the canopy’s lower lateral band.

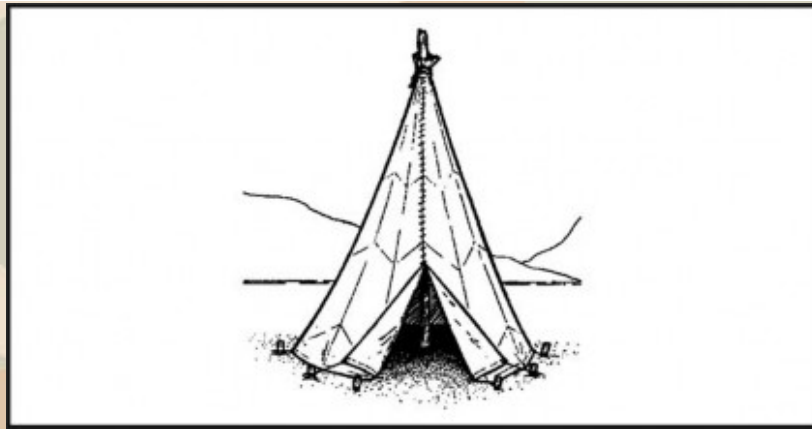


Figure 5-5. One-Pole Parachute Tepee

5-23. To make this tepee, you should—

- Select a shelter site and scribe a circle about 4 meters (13 feet) in diameter on the ground.
- Stake the parachute material to the ground using the lines remaining at the lower lateral band.
- After deciding where to place the shelter door, emplace a stake and tie the first line (from the lower lateral band) securely to it.
- Stretch the parachute material taut to the next line, emplace a stake on the scribed line, and tie the line to it.
- Continue the staking process until you have tied all the lines.
- Loosely attach the top of the parachute material to the center pole with a suspension line you previously cut and, through trial and error, determine the point at which the parachute material will be pulled tight once the center pole is upright.
- Securely attach the material to the pole.
- Using a suspension line (or inner core), sew the end gores together leaving 1 to 1.2 meters (3 to 4 feet) for a door.

survival fire

Fire:

Fire: Get a fire going. You should know how to get a fire going under extreme adverse conditions, such as during rain or freezing winter weather.

Most of the process of creating a successful fire is in the preparation. You need to gather, prepare, and arrange your fire building materials, including tinder, so that you will succeed on the first attempt.



image by Simon Berger from Pixabay

survival signal

Signal:

Signal: If you are expecting rescue, the next priority is to make sure that your rescuers can find you. Your rescuers may be other members of an adventuring party. Some signal methods are signal fires, signal smoke, signal mirrors, signal whistles, modern flares (or magic that acts like a flare), or modern electronics (such as cell phone or personal locator beacon).

“In March 1981, wildlife photographer Carl McCunn went on a hiking expedition, he all the necessary equipment. In fact, he packed enough supplies to last him until August. He arranged for a bush pilot to transport him to a remote lake in Alaska. However, in a tragic oversight, he failed to make proper arrangements for a return flight.

Concerned for his well-being when he failed to come back, his family enlisted the assistance of an Alaskan State trooper to conduct a welfare check.

During the search, the pilot located Carl's campsite and observed him alive, waving a red bag in the air. Regrettably, the trooper mistakenly interpreted Carl's signal as a casual greeting, assuming that he did not require any assistance. Consequently, the trooper departed without offering aid.

Carl found himself perplexed as to why the plane did not return, but soon he came to the realization that he had committed yet another critical mistake. He had unintentionally conveyed the wrong message to the pilot, indicating that he was fine and did not require any help.

As his provisions dwindled, Carl contemplated the idea of trekking the 75-mile distance to Fort Yukon. However, considering the scarcity of supplies, he ultimately opted to remain at the campsite. Then, on December 18th, faced with the agonizing prospect of starving to death, he made the deeply distressing choice to take his own life.

He documented his agony in his diary. His last entry was, ‘Dear God in Heaven, please forgive me my weakness and my sins. Please look over my family.’ ” —[Historic Vids](#)



image by Gerhard G. from Pixabay

survival water

Water:

Water: Depending on the conditions, a healthy adult human can die from lack of water as soon as a few hours and typically at most about three days. The rule of threes claims that you can live for about three days without water.

When your urine starts to darken, your need for water is becoming desperate. Also, don't drink your own urine. It contains toxins and salts your body spent a lot of energy removing and it can cause you to hallucinate.

US Army Field Manual 3-05-70 **SURVIVAL** May 2002:

WATER

4-2. Your body loses water through normal body processes (sweating, urinating, and defecating). During average daily exertion when the atmospheric temperature is 20 degrees Celsius (68 degrees Fahrenheit [F]), the average adult loses and therefore requires 2 to 3 liters of water daily. Other factors, such as heat exposure, cold exposure, intense activity, high altitude, burns, or illness, can cause your body to lose more water. You must replace this water.

4-3. Dehydration results from inadequate replacement of lost body fluids. It decreases your efficiency and, if you are injured, it increases your susceptibility to severe shock. Consider the following results of body fluid loss:

- A 5-percent loss results in thirst, irritability, nausea, and weakness.
- A 10-percent loss results in dizziness, headache, inability to walk, and a tingling sensation in the limbs.
- A 15-percent loss results in dim vision, painful urination, swollen tongue, deafness, and a numb feeling in the skin.
- A loss greater than 15 percent may result in death.

4-4. The most common signs and symptoms of dehydration are—

- Dark urine with a very strong odor.

- Low urine output.
- Dark, sunken eyes.
- Fatigue.
- Emotional instability.
- Loss of skin elasticity.
- Delayed capillary refill in fingernail beds.
- Trench line down center of tongue.
- Thirst. (Last on the list because you are already 2-percent dehydrated by the time you crave fluids.)

4-5. You should replace the water as you lose it. Trying to make up a deficit is difficult in a survival situation, and thirst is not a sign of how much water you need.

4-6. Most people cannot comfortably drink more than 1 liter of water at a time. So, even when not thirsty, drink small amounts of water at regular intervals each hour to prevent dehydration.

4-7. If you are under physical and mental stress or subject to severe conditions, increase your water intake. Drink enough liquids to maintain a urine output of at least 0.5 liters every 24 hours.

4-8. In any situation where food intake is low, drink 6 to 8 liters of water per day. In an extreme climate, especially an arid one, the average person can lose 2.5 to 3.5 liters of water **per hour**. In this type of climate, you should drink 8 to 12 ounces of water every 30 minutes. It is better to regulate water loss through work or rest cycles because overhydration can occur if water intake exceed 1 1/2 quarts per hour. Overhydration can cause low serum sodium levels resulting in cerebral and pulmonary edema, which can lead to death.

4-9. With the loss of water there is also a loss of electrolytes (body salts). The average diet can usually keep up with these losses but in an extreme situation or illness, additional sources need to be provided. You should maintain an intake of carbohydrates and other necessary electrolytes.

4-10. Of all the physical problems encountered in a survival situation, the loss of water is the most preventable. The following are basic guidelines for the prevention of dehydration:

- *Always drink water when eating.* Water is used and consumed as a part of the digestion process and can lead to dehydration.

- *Acclimatize.* The body performs more efficiently in extreme conditions when acclimatized.
- *Conserve sweat, not water.* Limit sweat-producing activities but drink water.
- *Ration water.* Until you find a suitable source, ration your sweat, not your water. Limit activity and heat gain or loss.

4-11. You can estimate fluid loss by several means. A field dressing holds about 0.25 liters (1/4 canteen) of fluid. A soaked T-shirt holds 0.5 to 0.75 liters.

4-12. You can also use the pulse and breathing rate to estimate fluid loss. Use the following as a guide:

- With a 0.75-liter loss the wrist pulse rate will be under 100 beats per minute and the breathing rate 12 to 20 breaths per minute.
- With a 0.75- to 1.5-liter loss the pulse rate will be 100 to 120 beats per minute and 20 to 30 breaths per minute.
- With a 1.5- to 2-liter loss the pulse rate will be 120 to 140 beats per minute and 30 to 40 breaths per minute. Vital signs above these rates require more advanced care.

survival food

Food:

Food: You can go surprisingly long without needing food. People fast, sometimes for days. The rules of threes claims that you can live for about three weeks without food.

If you have food, ration it to make it last much longer than normal.

After water, your biggest immediate nutritional need is sugar. Lack of sugar makes you drowsy and can lead to passing out. After a day or two without carbohydrates, your brain will be adversely effected and your decision making ability drops to the point of being dangerous.

FOOD

4-13. Although you can live several weeks without food, you need an adequate amount to stay healthy. Without food your mental and physical capabilities will deteriorate rapidly and you will become weak. Food provides energy and replenishes the substances that your body burns. Food provides vitamins, minerals, salts, and other elements essential to good health. Possibly more important, it helps morale.

4-14. The three basic sources of food are plants, animals (including fish), and issued rations. In varying degrees, both provide the calories, carbohydrates, fats, and proteins needed for normal daily body functions. You should use rations to augment plant and animal foods, which will extend and help maintain a balanced diet.

4-15. Calories are a measure of heat and potential energy. The average person needs 2,000 calories per day to function at a minimum level. An adequate amount of carbohydrates, fats, and proteins without an adequate caloric intake will lead to starvation and cannibalism of the body's own tissue for energy.

Plants

4-16. Plant foods provide carbohydrates—the main source of energy. Many plants provide enough protein to keep the body at normal efficiency. Although plants may not provide a balanced diet, they will sustain you even in the arctic, where meat's heat-producing qualities are normally essential. Many plant foods such as nuts and seeds will give you enough protein and oils for normal efficiency. Roots, green vegetables, and plant foods containing natural sugar will provide calories and carbohydrates that give the body natural energy.

4-17. The food value of plants becomes more and more important if you are eluding the enemy or if you are in an area where wildlife is scarce. For instance—

- You can dry plants by wind, air, sun, or fire. This retards spoilage so that you can store or carry the plant food with you to use when needed.
- You can obtain plants more easily and more quietly than meat. This is extremely important when the enemy is near.

Animals

4-18. Meat is more nourishing than plant food. In fact, it may even be more readily available in some places. However, to get meat, you need to know the habits of and how to capture the various wildlife.

4-19. To satisfy your immediate food needs, first seek the more abundant and more easily obtained wildlife, such as insects, crustaceans, mollusks, fish, and reptiles. These can satisfy your immediate hunger while you are preparing traps and snares for larger game.

survival communications

Communications:

Communications requires sending (transmitting) and receiving.

Even if you are a loner, you want to listen to radio to know what others are doing around you.

Family Radio Service (FRS), also known as walkie talkies, is low cost and requires no license. It only works for line of sight and even then over short distances.

Citizen's Band radio (CB) is inexpensive and doesn't require a license. Solar cycles have an impact on how far a CB signal will carry.

General Mobile Radio Service (GMRS) operate on the same frequencies as FRS. GMRS requires an FCC license, but no test. GMRS are higher power than FRS and can work with repeaters to extend the range.

Amateur radio (ham) is a legal method for transmitting radio signals. You must take a test to be licensed. There are three levels: Technician, General, or Amateur Extra. There are frequency bands: High Frequency (HF), Very High Frequency (VHF), and Ultra High Frequency (UHF).

Antennas used for transmitting have a red ring painted around their base to show they radiate signals. Antennas used for receiving have a blue ring painted around their base. Microwave radio telephone towers are painted red and white.

survival trekking

Self-Rescue:

Self-Rescue: Once you have your situation under control, you must determine if it is best to stay at your current location or self-rescue. This is best with a plane crash or other event that is likely to initiate a rescue attempt. If you reasonably expect rescuers, you want to make it as easy as possible to find you and a crash site is much more visible than a person.

Staying put is best with a plane crash or other event that is likely to initiate a rescue attempt. If you reasonably expect rescuers, you want to make it as easy as possible to find you and a crash site is much more visible than a person.

In some situations it may not be safe to remain at your original location. After three days to a week, searches will often come to an end. You may eventually have to make your way to safety on your own. You must make a determination of when self-rescue is the appropriate choice. Before leaving your original site, clearly mark it and leave an indication of which way you went.

survival knapping

Knapping:

If you are going to pick up knapping, consider starting with the bottoms of glass bottles. Easier to shape and learn.

Wear heavy protective gloves and a heavy protective apron to protect yourself from glass splinters.

survival knife

Knife:

Safely handing a knife to someone else:

Giver points the tip of your knife at yourself, with sharp edge away from palm, fingers out of the way.

Receiver grips handle, lift blade directly away from palm, avoiding fingers, then draw back to self.

Carry a knife in the kitchen at your side, tip pointed straight down blade facing your thigh, arm rigid.

You can also carry the knife with a cutting board, blade flat against the center of the board.

Call out that you are moving with a knife.

survival music and food

Music and food:

One of the biggest things for staying alive is to have some way to keep up your spirits.

Get a cheap wooden guitar and learn the C, G, and F chords and you can sound reasonably pleasant on most pop songs ever.

survival electricity

Electrciity:

Electricity is surprisingly easy to make.

survival lighting

Lighting:

Hand pump, hand squeeze, hand crank LED flashlights can be obtained for under a dollar, more for fancier ones.

These will give you emergency lighting under any conditions without worrying about batteries or keeping them charged.

cannabis clergy

Reality: If the government decides it wants to “get you”, then your only chance is if you can afford a really, really good lawyer.

The law is whatever the government decides the law is.

The rights you heard about in grade school only apply if you can afford a great lawyer. Public defenders are under-budgeted and only want to process paperwork for plea bargains. They simply don't have the time or money for trials.

I don't want to discourage anyone from worshipping with cannabis, but I do want to strongly warn everyone that you have a significant risk of long term imprisonment or worse, especially outside of major industrialized nations.

Please act responsibly. Please hire a lawyer if you can possibly afford to do so.



basic defense

The basic religious defense is that the law in question either (1) is clearly biased against or for a particular religion or religions and therefore against the first amendment (applied by the 14th amendment to the states) and the California state constitution or (2) is law of general applicability that places a burden on a sincerely held religious belief and therefore against the RFRA (federal) and the RLUIPA (federal and state).

The RFRA is the Religious Freedom Restoration Act of 1993. The RLUIPA is the Religious Land Use and Institutionalized Persons Act.

The Ayahuasca case, February 21, 2006, *Gonzales v. Centro Espirita Beneficente União do Vegetal*, 546 U.S. 418 (2006), affirms that the RFRA applies to religious use of a Schedule I drug that is banned by federal law.

RFRA

The RFRA is the Religious Freedom Restoration Act of 1993.

The RFRA first requires that the defendant prove through a preponderance of evidence that an otherwise neutral law of general applicability places a substantial burden on a sincerely held religious belief that an act is required by the religion.

The government must then show that it has a compelling interest in criminalizing the religious act for the specific instance. It is not enough that the government merely claim that the act is dangerous. It must prove it is dangerous.

Then the government must prove that it has applied the least restrictive method possible for meeting the government's compelling interest.

ayahuasca case

In the February 21, 2006 case of *Gonzales v. Centro Espirita Beneficente União do Vegetal*, 546 U.S. 418 (2006), Chief Justice C.J. Roberts writing for the 8-0 majority (Alito didn't participate because he didn't hear the case) claimed regarding the religious use of DMT-containing tea:

1. The Religious Freedom Restoration Act is the controlling law for this matter.
2. The Government must prove that it has a compelling interest in criminalizing the religious use of this tea for this specific instance.
3. Just because the Government says that a drug is dangerous in legislation (DMT is Schedule I) does not relieve the government of its obligation to show that it is dangerous in this specific case.
4. The Government bears the burden of showing actual harm and the evidence the Government presented about actual harm caused by using DMT-containing tea did not meet its standard.
5. The government failed to provide a clear compelling interest which would override the default assumption of religious freedom as spelled out in the Religious Freedom Restoration Act.
6. The Supreme Court never even got to considering whether the ban on the tea was the "least restrictive means" available to meet the governmental interest because the Government failed to show a compelling interest in the first place.

burden

Being arrested pretty much automatically constitutes a substantial burden.

sincerity

The government can question the sincerity of beliefs.

The three basic tests to qualify for protection under the federal Religious Freedom Restoration Act (RFRA) are: (1) the government burdens a (2) sincerely held (3) religious belief.

While the government seems to normally challenge whether or not your beliefs are religious, they can also challenge the sincerity of your beliefs. There is a Supreme Court case (I will add the citation later) involving two different people challenging (under completely different laws, *not* the RFRA) Florida's requirement to vaccinate their children. The Supreme Court protected one family because the court decided their religious beliefs were sincere and rejected the other family's protection because the court decided that their religious beliefs were clearly faked.

You have to sincerely believe that the divine has called you to be a medical marijuana minister or medical cannabis minister.

You can't fake this to try to pull something over on the government.

Your religious beliefs have to be sincere and real.

This book covers how to be a medical marijuana minister or medical cannabis minister. Anyone with sincere religious beliefs that their religion requires them to minister to and help those who need medical marijuana can become a medical marijuana minister or medical cannabis minister.

I am emphasizing that your religious beliefs must be sincere and real.

I have already pointed out several easy ways to get written documentation (including [Per Neter Kemet](#), [Universal Life Church](#), and [The Hawai'i Cannabis Ministry \(THC Ministry\)](#)).

valid religion

The government can question whether or not the beliefs are religious (non-religious beliefs don't have this protection).

The government is not supposed to be able to question the validity of beliefs, just whether or not they are religious.

The two most common tests for being a legally valid religion are the Meyers' Test and the IRS test, both of which are highly biased in favor of Roman Catholic beliefs.

The California state Department of Fair Employment and Housing (DFEH) has already ruled that my religion is a legally valid religious creed subject to state protection, although this ruling

may or may not have applicability for a criminal prosecution.

There are numerous specific court cases that address the question of what constitutes a legally valid religion or religious creed. These court cases give specific standards (or tests) based on the Roman Catholic Church.

Currently there is a six judge majority of the U.S. Supreme Court who are active members of the Roman Catholic Church (John Roberts, Anthony M. Kennedy, Antonin Scalia, Clarence Thomas, Samuel Alito, and Sonia Sotomayor).

In theory, no court should question the validity of any religious beliefs.

In reality, I assume that facing a hostile judge I must prove through preponderance of evidence that my religion is substantially, qualitatively, and quantifiably more legally valid than the officially established Roman Catholic Church of the U.S. Supreme Court.

strict scrutiny

U.S. District Chief Judge Vaugh R. Walker struck down Proposition 8 using two standards of the law.

One standard Judge Walker used was that the law was based on so many unfounded claims that there was no rational basis for the law. This could be used against the federal law placing cannabis as a Schedule I drug. Francis Young, a DEA administrative law judge, ruled in 1988 that cannabis had no known danger (Docket # 86-22).

The other standard that Judge Walker used to strike down Proposition 8 was strict scrutiny.

Strict scrutiny is a test in discrimination cases holding laws to a higher standard when they adversely affect certain minority groups.

To meet strict scrutiny a law must be justified by a “compelling government interest” and must be “narrowly tailored” to meet that interest.

The tests for whether a minority is within a “suspect classification” are: (1) been historically targeted by discrimination; (2) a “discrete” and “insular” community; (3) be a minority for an unchangeable characteristic; and (4) lack the power to protect themselves using the political process. A qualifying group does not have to meet all four standards and other factors may be considered.

This obviously doesn't apply to Christian medical marijuana ministers, but it certainly applies to Pagan and Witch medical marijuana ministers (including my own religion).

major cases

- *Young Life Campaign v. Patino* (1981) 122 Cal.App.3d 559, 561

- *Sherbert* 374 U.S. 398, 83 S.Ct. 1790, 10 L.Ed.2d 965
- *Wisconsin v. Yoder* 406 U.S. 205, 92 S.Ct. 1526, 32 L.Ed.2d 15 (1972)
- *Friedman v. Southern California Permanente Medical*
- *Malnak v. Yogi*
- *Meyers* November 5, 1996, 95 F.3d 1475

Courts have upheld the right of Native Americans to use the hallucinogenic plant peyote in religious rituals, e.g., *State v. Whittington*, 19 Ariz. App. 27, 504 P.2d 950 (1973), cert. denied, 417 U.S. 946, 94 S.Ct. 3071 (1974); **People v. Woody**, 61 Cal.2d 716, 394 P.2d 813, 40 Cal. Rptr. 69 (1964); *Whitehorn v. State*, 561 P.2d 539 (Okla. Crim. App. 1977); contra *State v. Big Sheep*, 75 Mont. 219, 243 P. 1067 (1926); *State v. Soto*, 21 Or. App. 794, 537 P.2d 142 (1975), cert. denied, 424 U.S. 955, 96 S.Ct. 1431 (1976).

burden on religious beliefs

cannabis sacrament

In 1979 the Supreme Court of Florida found that (1) the Ethiopian Zion Coptic Church represents a religion within the First Amendment to the Constitution of the United States and (2) the “use of cannabis is an essential portion of the religious practice.” [Town v. State ex rel. Reno](#) (external link), 337 So.2d 648, 649 (Fla. 1979), cert denied, 449 U.S. 803 (1980). “Further, the Ethiopian Zion Coptic Church is not a new church or religion but the record reflects it is centuries old and has regularly used cannabis as its sacrament.” [source: [Ethiopian Zion Coptic Church: Fighting for our rights](#)]

arrest

Being arrested pretty much automatically constitutes a substantial burden.

In 1980 several members of the Ethiopian Zion Coptic Church were arrested unloading 20 tons of marijuana from a boat off the coast of Maine. [United States v. Rush](#) [external link], 738 F.2d 497 (1st Cir. 1984), cert. denied, 471 U.S. 1120 (1985). The court found (1) that the Ethiopian Zion Coptic Church is a religion embracing beliefs which are protected by the First Amendment, (2) that the use of cannabis is an integral part of the religious practice of the Church, and (3) that [all of the defendants] are members of the Church and sincerely embrace the beliefs of the Church. 738 F.2d at 512. [source: [Ethiopian Zion Coptic Church: Fighting for our rights](#)]

sincerity of religious beliefs

The government can question the sincerity of beliefs.

The three basic tests to qualify for protection under the federal Religious Freedom Restoration Act (RFRA) are: (1) the government burdens a (2) sincerely held (3) religious belief.

While the government seems to normally challenge whether or not your beliefs are religious, they can also challenge the sincerity of your beliefs. There is the New York federal district court Wexler case (which the anti-immunization movement named for the original trial judge) involving two different people challenging (under completely different laws, *not* the RFRA) New York's requirement to vaccinate their children. The federal court protected one family because the court decided their religious beliefs were sincere and rejected the other family's protection because the court decided that their religious beliefs were clearly faked. [The text of the decision regarding sincerity is quoted below.]

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There are several easy ways to get written documentation (including [Per Neter Kemet](#), [Universal Life Church](#), and [The Hawai'i Cannabis Ministry \(THC Ministry\)](#)).

legal standards

"Sincerity analysis seeks to determine the subjective good faith of an adherent ... The goal, of course, is to protect only those beliefs which are held as a matter of conscience. Human nature being what it is, however, it is frequently difficult to separate this inquiry from a forbidden one involving the verity of the underlying belief." —*Barber*

"While the "truth" of a belief is not open to question, there remains the significant question whether it is "truly held." This is the threshold question of sincerity which must be resolved in every case. It is, of course, a question of fact" —*Seeger*

The legal standard in the Religious Freedom Restoration Act is that religious beliefs must be sincerely held.

In the 1990s a Los Angeles woman claimed a religious defense for prostitution. She claimed to be a priestess of Isis and claimed to be engaging in an ancient Egyptian religious practice where a priestess has sex as the Goddess rather than as a human. The jury was going along with her defense until the prosecutor asked a series of simple questions about Isis that the woman was completely unable to answer. This failure convinced the jury that her religious beliefs weren't sincere.

qualifications

You must be able to demonstrate in court that you understand your religious beliefs and that your religious beliefs are sincere. A major goal of this web site is to provide that detailed information for a wide variety of possible religious beliefs.

cases

Wexler Decision

From the case decided by Judge Leonard D. Wexler, United States District Court, Eastern District of New York, October 21, 1987, CV 87-3116 ALAN PAUL SHERR, etc., et al. against NORTHPORT-EAST NORTHPORT UNION FREE SCHOOL DISTRICT, et al. and CV 87-3197 LOUIS LEVY, etc., et al. against NORTHPORT-EAST NORTHPORT UNION FREE SCHOOL DISTRICT, et al.

VII. SINCERITY OF PLAINTIFFS' BELIEFS

In order for plaintiffs to be afforded the exemption from immunization that they seek, it is not sufficient merely that the beliefs that they assert as grounds for exemption be religious in nature. It must also be demonstrated that the espoused beliefs are sincerely held and that the stated beliefs, even if accurately reflecting plaintiffs' ultimate conclusions about the advisability of inoculation of their children, do in fact stem from religious convictions and have not merely been framed in terms of religious belief so as to gain the legal remedy desired.^{7/}

Attempts to ascertain the sincerity of claims of religious belief must be undertaken with extreme caution. The Second Circuit observed in Barber:

Sincerity analysis seeks to determine the subjective good faith of an adherent ... The goal, of course, is to protect only those beliefs which are held as a matter of conscience. Human nature being what it is, however, it is frequently difficult to separate this inquiry from a forbidden one involving the verity of the underlying belief.

650 F.2d at 441. Any form of governmental investigation into the “objective truth” of a person’s religious beliefs, be it in a judicial form or otherwise, in essence puts the individual on trial for heresy. See *United States v. Ballard*, 322 U.S. 78, 64 S.Ct. 882 (1944). As the Supreme Court emphasized in *Seeger*, however:

While the “truth” of a belief is not open to question, there remains the significant question whether it is “truly held.” This is the threshold question of sincerity which must be resolved in every case. It is, of course, a question of fact

380 U.S. at 185, 85 S.Ct. at 863. See also, e.g., *Africa*, 662 F.2d 1025; *Stevens*, 428 F.Supp. 896; *Riga*, *Religious, Sincerity, and Free Exercise*, 25 *Catholic Lawyer* 246 (1980).

FOOTNOTES:

7/ The school district defendants have challenged the sincerity of plaintiffs’ assertions of religious beliefs that prohibit the vaccination of their children. Although counsel for the state defendants participated in cross-examination of Alan Paul Sherr and Louis Levy concerning the beliefs they and their families purportedly hold, the state defendants declare in the papers they filed subsequent to the taking of plaintiffs’ testimony that they do not now question the sincerity of plaintiffs’ avowed adherence to their respective systems of belief.

Ethiopian Zion Coptic Church

In 1980 several members of the Ethiopian Zion Coptic Church were arrested unloading 20 tons of marijuana from a boat off the coast of Maine. [United States v. Rush](#) [external link], 738 F.2d 497 (1st Cir. 1984), cert. denied, 471 U.S. 1120 (1985). The court found (1) that the Ethiopian Zion Coptic Church is a religion embracing beliefs which are protected by the First Amendment, (2) that the use of cannabis is an integral part of the religious practice of the Church, and (3) that [all of the defendants] are members of the Church and sincerely embrace the beliefs of the Church. 738 F.2d at 512. [source: [Ethiopian Zion Coptic Church: Fighting for our rights](#)]

In 1984 the Supreme Court of Iowa found: “Olsen is a member and priest of the Ethiopian Zion Coptic Church. Testimony at his trial revealed the bona fide nature of this religious organization and the use of marijuana within it.” [State of Iowa v. Carl Eric Olsen](#) [external website], No. 171/69079 (Iowa 1984). [source: [Ethiopian Zion Coptic Church: Fighting for our rights](#)]

religious beliefs

The government can question whether or not the beliefs are religious in nature.

The three basic tests to qualify for protection under the federal Religious Freedom Restoration Act (RFRA) are: (1) the government burdens a (2) sincerely held (3) religious belief.

The government seems to normally challenge whether or not your beliefs are religious.

The most common test is the so-called Meyers' Test.

legal standards

The U.S. Supreme Court requires that you must have a **sincerely held religious belief**.

The legal standard in the Religious Freedom Restoration Act is that beliefs must be religious.

qualifications

You must be able to demonstrate in court that you understand your religious beliefs and that your beliefs are religious, rather than philosophical or just a lifestyle. A major goal of this web site is to provide that detailed information for a wide variety of possible religious beliefs.

cases

In June 1993, the U.S. Supreme Court held that a state law banning a religious practice where other individuals are allowed to do the same thing for a secular purpose cannot withstand constitutional scrutiny without a showing of compelling state interest. [Church of Lukumi Babalu Aye v. City of Hialeah](#) [external link], 508 U.S. 520 (1993). [source: [Ethiopian Zion Coptic Church: Fighting for our rights](#)]

religious requirement

The government gives greater weight to religious beliefs that are requirements.

legal standards

The legal standard in the Religious Freedom Restoration Act is that beliefs must be a requirement.

qualifications

The courts give greater religious protection to religious beliefs that are a religious requirement. A major goal of this web site is to provide that detailed information for a wide variety of possible religious beliefs.

cases

In 1979 the Supreme Court of Florida found that (1) the Ethiopian Zion Coptic Church represents a religion within the First Amendment to the Constitution of the United States and (2) the “use of cannabis is an essential portion of the religious practice.” [Town v. State ex rel. Reno](#) (external link), 337 So.2d 648, 649 (Fla. 1979), cert. denied, 449 U.S. 803 (1980). “Further, the Ethiopian Zion Coptic Church is not a new church or religion but the record reflects it is centuries old and has regularly used cannabis as its sacrament.” [source: [Ethiopian Zion Coptic Church: Fighting for our rights](#)]

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Meyer's Test

The government can question whether or not the beliefs are religious in nature. The most common test is the so-called Meyers' Test used in the case of UNITED STATES of America, Plaintiff-Appellee, v. David MEYERS, Defendant-Appellant, United States Court of Appeals for the Tenth Circuit, November 5, 1996, 95 F.3d 1475.

legal standards

The Meyers' Test:

1. Ultimate Ideas
2. Metaphysical Beliefs
3. Moral or Ethical System
4. Comprehensiveness of Beliefs
5. Accoutrements of Religion
 - a. Founder, Prophet, or Teacher
 - b. Important Writings
 - c. Gathering Places
 - d. Keepers of Knowledge
 - e. Ceremonies and Rituals
 - f. Structure or Organization
 - g. Holidays
 - h. Diet or Fasting
 - i. Appearance and Clothing
 - j. Propagation

cases

The following is a direct quotation from the Appeals Court decision.

Facts

...

Just prior to trial, the government discovered that Jones had lied to investigating officers in his initial statements by omitting Recore's middleman role in the conspiracy and by stating that he dealt directly with Meyers when in fact he dealt primarily with Recore. Jones allegedly lied pursuant to an agreement between Meyers, Recore, and himself which provided that if caught Recore and Jones would intentionally blame Meyers for the entire conspiracy so that Meyers could "try out" his religious freedom

defense.

At trial, Jones testified that from January to July, 1994, he would receive between five and seven pounds of marijuana from Recore every seven to ten days; in July, 1994, he traveled to El Paso, Texas, to obtain marijuana from Federico at the direction of Recore, who was acting at the direction of Meyers; and at the end of August, 1994, he traveled to Tucson, Arizona, to meet with Meyers' cousin, Mitchell Meyers, and obtain four pounds of marijuana. Recore testified that he was receiving all the marijuana he distributed to Jones from Meyers and that he was acting at Meyers' direction by delivering the marijuana to Jones.

Before trial, Meyers filed numerous motions including motions to dismiss based on religious freedom under the First Amendment and the Religious Freedom Restoration Act, 42 U.S.C. § 2000bb et. seq. (RFRA). At the hearing on Meyers' religious freedom defense, Meyers testified that he is the founder and Reverend of the Church of Marijuana and that it is his sincere belief that his religion commands him to use, possess, grow and distribute marijuana for the good of mankind and the planet earth.

After a careful and thorough analysis, the district court concluded that the neutral drug laws at issue were not subject to a First Amendment free exercise challenge and that Meyers' beliefs did not constitute a religion for purposes of the RFRA. *United States v. Meyers*, 906 F.Supp. 1494, 1509 (D.Wyo.1995). Therefore, the court denied his motion to raise a RFRA defense.

...

B. RFRA

Meyers argues that the district court erred in refusing to recognize his interpretation of his own religion and in refusing to give his beliefs the status of religion under the RFRA.

In response to the Court's rejection of the compelling governmental interest test in *Smith*, Congress passed the RFRA reestablishing the compelling interest test of *Sherbert*, 374 U.S. 398, 83 S.Ct. 1790, 10 L.Ed.2d 965, and *Wisconsin v. Yoder*, 406 U.S. 205, 92 S.Ct. 1526, 32 L.Ed.2d 15 (1972), as the analytical framework governing all cases where free exercise of religion is substantially burdened. 42 U.S.C. § 2000bb(b)(1).

The RFRA provides that "[g]overnment shall not substantially burden a person's exercise of religion even if the burden results from a rule of general applicability, except as provided in subsection (b) of this section." § 2000bb-1(a). Subsection (b) provides that:

Government may substantially burden a person's exercise of religion only if it

demonstrates that application of the burden to the person--

(1) is in furtherance of a compelling governmental interest; and

(2) is the least restrictive means of furthering that compelling governmental interest.

42 U.S.C. § 2000bb-1(b).

Under the RFRA, a plaintiff must establish, by a preponderance of the evidence, three threshold requirements to state a *prima facie* free exercise claim. *Thiry v. Carlson*, 78 F.3d 1491, 1494 (10th Cir.1996). The governmental action must (1) substantially burden, (2) a religious belief rather than a philosophy or way of life, (3) which belief is sincerely held by the plaintiff. *Id.* The government need only accommodate the exercise of actual religious convictions. *Werner v. McCotter*, 49 F.3d 1476, 1479 n. 1 (10th Cir.) (citing *Yoder*, 406 U.S. at 215-19, 92 S.Ct. at 1533-35; *Thomas v. Review Bd.*, 450 U.S. 707, 713-18, 101 S.Ct. 1425, 1429-32, 67 L.Ed.2d 624 (1981)), cert. denied, --- U.S. ----, 115 S.Ct. 2625, 132 L.Ed.2d 866 (1995). Once the plaintiff has established the threshold requirements by a preponderance of the evidence, the burden shifts to the government to demonstrate that the challenged regulation furthers a compelling state interest in the least restrictive manner. *Werner*, 49 F.3d at 1480 n. 2 (citing 42 U.S.C. § 2000bb-1(b)).

Our review of the requirements, although largely factual in nature, presents mixed questions of fact and law. *Thiry*, 78 F.3d at 1495. We review the meaning of the RFRA *de novo*, including the definitions as to what constitutes substantial burden and what constitutes religious belief, and the ultimate determination as to whether the RFRA has been violated. *Id.* Sincerity is a factual matter and, as with historical and other underlying factual determinations, we defer to the district court's findings, reversing only if those findings are clearly erroneous. *Id.*

There is no dispute that Meyers' beliefs are sincerely held and that they are substantially burdened by 21 U.S.C. §§ 841 and 846 and 18 U.S.C. § 2. The issue is whether his sincerely held beliefs are "religious beliefs," rather than a philosophy or way of life. In analyzing this issue, the district court examined the cases that have delved into the question of "what is religion" and catalogued the many factors used to determine whether a set of beliefs is religious in nature.² *Meyers*, 906 F.Supp. at 1501. The court then used its list of factors to examine Meyers' beliefs to determine if his beliefs fit the factors sufficiently to be included in the realm of "religious beliefs."

Keeping in mind that the threshold for establishing the religious nature of his beliefs is low, the court considered the following factors:

1. Ultimate Ideas: Religious beliefs often address fundamental questions about life, purpose, and death. As one court has put it, "a religion addresses fundamental and

ultimate questions having to do with deep and imponderable matters.” Africa, 662 F.2d at 1032. These matters may include existential matters, such as man’s sense of being; teleological matters, such as man’s purpose in life; and cosmological matters, such as man’s place in the universe.

2. Metaphysical Beliefs: Religious beliefs often are “metaphysical,” that is, they address a reality which transcends the physical and immediately apparent world. Adherents to many religions believe that there is another dimension, place, mode, or temporality, and they often believe that these places are inhabited by spirits, souls, forces, deities, and other sorts of inchoate or intangible entities.

3. Moral or Ethical System: Religious beliefs often prescribe a particular manner of acting, or way of life, that is “moral” or “ethical.” In other words, these beliefs often describe certain acts in normative terms, such as “right and wrong,” “good and evil,” or “just and unjust.” The beliefs then proscribe those acts that are “wrong,” “evil,” or “unjust.” A moral or ethical belief structure also may create duties--duties often imposed by some higher power, force, or spirit--that require the believer to abnegate elemental self-interest.

4. Comprehensiveness of Beliefs: Another hallmark of “religious” ideas is that they are comprehensive. More often than not, such beliefs provide a telos, an overreaching array of beliefs that coalesce to provide the believer with answers to many, if not most, of the problems and concerns that confront humans. In other words, religious beliefs generally are not confined to one question or a single teaching. Africa, 662 F.2d at 1035.

5. Accoutrements of Religion: By analogy to many of the established or recognized religions, the presence of the following external signs may indicate that a particular set of beliefs is “religious”:

a. Founder, Prophet, or Teacher: Many religions have been wholly founded or significantly influenced by a deity, teacher, seer, or prophet who is considered to be divine, enlightened, gifted, or blessed.

b. Important Writings: Most religions embrace seminal, elemental, fundamental, or sacred writings. These writing often include creeds, tenets, precepts, parables, commandments, prayers, scriptures, catechisms, chants, rites, or mantras.

c. Gathering Places: Many religions designate particular structures or places as sacred, holy, or significant. These sites often serve as gathering places for believers. They include physical structures, such as churches, mosques, temples, pyramids, synagogues, or shrines; and natural places, such as springs, rivers, forests, plains, or mountains.

d. Keepers of Knowledge: Most religions have clergy, ministers, priests, reverends,

monks, shamans, teachers, or sages. By virtue of their enlightenment, experience, education, or training, these people are keepers and purveyors of religious knowledge.

e. Ceremonies and Rituals: Most religions include some form of ceremony, ritual, liturgy, sacrament, or protocol. These acts, statements, and movements are prescribed by the religion and are imbued with transcendent significance.

f. Structure or Organization: Many religions have a congregation or group of believers who are led, supervised, or counseled by a hierarchy of teachers, clergy, sages, priests, etc.

g. Holidays: As is etymologically evident, many religions celebrate, observe, or mark “holy,” sacred, or important days, weeks, or months.

h. Diet or Fasting: Religions often prescribe or prohibit the eating of certain foods and the drinking of certain liquids on particular days or during particular times.

i. Appearance and Clothing: Some religions prescribe the manner in which believers should maintain their physical appearance, and other religions prescribe the type of clothing that believers should wear.

j. Propagation: Most religious groups, thinking that they have something worthwhile or essential to offer non-believers, attempt to propagate their views and persuade others of their correctness. This is sometimes called “mission work,” “witnessing,” “converting,” or proselytizing.

Meyers, 906 F.Supp. at 1502-03 (footnotes omitted).

The district court emphasized that “it cannot rely solely on established or recognized religions to guide it in determining whether a new and unique set of beliefs warrants inclusion” and that “no one of these factors is dispositive, and that the factors should be seen as criteria that, if minimally satisfied, counsel the inclusion of beliefs within the term ‘religion.’ ” Id. at 1503. However, in accord with *Yoder*, the court noted that “[p]urely personal, political, ideological, or secular beliefs probably would not satisfy enough criteria for inclusion.” Id. at 1504. See *Yoder*, 406 U.S. at 216, 92 S.Ct. at 1533-34 (philosophical and personal beliefs are secular beliefs); *Africa*, 662 F.2d at 1036 (finding beliefs are secular not religious); *Berman*, 156 F.2d at 380-81 (beliefs which are moral and social are not religious); *Church of the Chosen People*, 548 F.Supp. at 1253 (beliefs which are sexual and secular are not religious).

After carefully examining Meyers’ beliefs derived from his testimony, the district court concluded that his beliefs were secular and, thus, did not constitute a “religion” for RFRA purposes. Meyers, 906 F.Supp. at 1509. The court concluded that:

Marijuana’s medical, therapeutic, and social effects are secular, not religious.... Here, the Court cannot give Meyers’ “religious” beliefs much weight because those

beliefs appear to be derived entirely from his secular beliefs. In other words, Meyers' secular and religious beliefs overlap only in the sense that Meyers holds secular beliefs which he believes so deeply that he has transformed them into a "religion."

While Meyers may sincerely believe that his beliefs are religious, this Court cannot rely on his sincerity to conclude that his beliefs rise to the level of a "religion" and therefore trigger RFRA's protections. Meyers is, of course, absolutely free to think or believe what he wants. If he thinks that his beliefs are a religion, then so be it. No one can restrict his beliefs, and no one should begrudge him those beliefs. None of this, however, changes the fact that his beliefs do not constitute a "religion" as that term is uneasily defined by law. Were the Court to recognize Meyers' beliefs as religious, it might soon find itself on a slippery slope where anyone who was cured of an ailment by a "medicine" that had pleasant side-effects could claim that they had founded a constitutionally or statutorily protected religion based on the beneficial "medicine."

Id. at 1508. Finally, the court noted that "Meyers' professed beliefs have an ad hoc quality that neatly justify his desire to smoke marijuana." Id. at 1509.

We agree with the district court. Under the district court's thorough analysis of the indicia of religion, which we adopt, we hold that Meyers' beliefs more accurately espouse a philosophy and/or way of life rather than a "religion." The district court did not err in prohibiting Meyers' religious freedom defense.

IRS guidelines

The government can question whether or not the beliefs are religious in nature. The IRS has a set of guidelines to determine if an organization is a legally valid church.

Once again these tests are highly biased towards the Roman Catholic Church, the religion of a six member majority of the U.S. Supreme Court.

My own religion passes about one third of these rules, even though it is much older than the Roman Catholic Church.

legal standards

The IRS guidelines for a legally valid church:

“a distinct legal existence,” —IRS definition of a church

“a recognized creed and form of worship,” —IRS definition of a church

“a definite and distinct ecclesiastical government,” —IRS definition of a church

“a formal code of doctrine and discipline,” —IRS definition of a church

“a distinct religious history,” —IRS definition of a church

“a membership not associated with any other church or denomination,” —IRS definition of a church

“an organization of ordained ministers,” —IRS definition of a church

“ordained ministers selected after completing prescribed studies,” —IRS definition of a church

“a literature of its own,” —IRS definition of a church

“established places of worship,” —IRS definition of a church

“regular congregations,” —IRS definition of a church

“regular religious services,” —IRS definition of a church

“Sunday schools for religious instruction of the young,” —IRS definition of a church

“school for the preparation of its ministers.” —IRS definition of a church

religious freedom reply to IRS standards

“Each of these criteria is fundamentally flawed.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

In summary, the IRS criteria are hopelessly flawed. They favor large, well-established, high or formal churches and discriminate against small, new, unconventional, informal or low churches. The Christian churches of the New Testament at Philippi, Corinth, and Thessalonica arguably would not meet the first through eighth, tenth, eleventh, and fourteenth criteria of the IRS test. The criteria are conceptually flawed and should be abandoned. In their place, the IRS should use a simpler, broader, and more constitutionally acceptable definition. — by Bruce J. Casino, [International Coalition for Religious Freedom](#)

age of belief

The IRS sets a standard of the age of a belief. My own religion is the oldest continually practiced religion in the world and a direct descendant of the first known religion in the world.

legal standards

“almost 300 years of consistent practice” (in reference to the age of Amish) — *Wisconsin v. Yoder*

“a distinct religious history,” —IRS definition of a church

religious freedom reply to IRS standards

The problem with the fifth criterion is that a new religion, by definition, cannot have “a distinct religious history.” “American civilization from the beginning and in each passing century has been continuously marked by extraordinary religious fertility and continues to exhibit this propensity to the present day.” The emergence of new religions is a common occurrence in American history. “The first Amendment serves to protect all religions, old and new, against government harassment, intrusion, injury and discrimination.” Baptists, Quakers, Mormons and Jehovah’s Witnesses each experienced persecution in America when their churches were new. Although no one would dispute that this history is unfortunate, a similar dynamic is at work in the present attitude of many in government toward new religions. Moreover, even established religious groups might not have a distinct history. “Due to the informal nature of the Plymouth Brethren, their religious history is indistinct.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

cannabis sacrament

In 1979 the Supreme Court of Florida found that (1) the Ethiopian Zion Coptic Church represents a religion within the First Amendment to the Constitution of the United States and (2) the “use of cannabis is an essential portion of the religious practice.” [Town v. State ex rel. Reno](#) [external link], 337 So.2d 648, 649 (Fla. 1979), cert denied, 449 U.S. 803 (1980). “Further, the Ethiopian Zion Coptic Church is not a new church or religion but the record reflects it is centuries old and has regularly used cannabis as its sacrament.” [source: [Ethiopian Zion Coptic Church: Fighting for our rights](#)]

Kemetic or ancient Egyptian religion

If a mere 300 years is enough to qualify the Amish as a legally valid religion, then Pr Ntr Kmt (Kemetic Witchcraft) with more than 12,500 years of archaeologically proven existence surely qualifies as being old enough to be a legally valid religion. That's more than seven times the age of the Roman Catholic Church.

Pr Ntr Kmt (often translated as “Egyptian Witchcraft” or “the ancient Egyptian religion”) is the oldest known established religion in the world.

The religion is deeply embedded in Western culture, as well as African, European, Asian, Chinese, and Indian culture. The religion is deeply embedded into the English language itself.

The use of cannabis in Pr Ntr Kmt has been carved in rock for thousands of years.

A residual version of this ancient practice survived in the Christian Coptic Church (mostly in Egypt, Sudan, and Ethiopia) using cannabis during religious services on a widespread basis well into the 20th Century (1900s) and less commonly to the present.

Egyptologists know that the Egyptian culture and religion predates the Pharaohs, but they are not certain by how long. Egyptologists generally agree that dates back to at least 5,500 B.C.E..

French Egyptologist Gaston Maspero (1846-1916) stated about Egyptian texts, “The religion and the texts which made it known to us were already established before the first dynasty. In order to understand them it is up to us to put ourselves in the frame of mind of the people who constructed them, more than seven thousand years ago.”

Ramese II (Ramses the Great) listed all of the historical and divine pharaohs who reigned over Kemet (ancient Egypt). A copy of this royal canon is on display at the museum of Egyptology of Turin (and is called the papyrus of Turin). Ramses claimed that the royal Egyptian lineage predated him by 13,420 years (yes, notice the 420 in the figure). Ramses lived from 1303 B.C.E. to 1213 B.C.E. and started his reign May 31, 1279 B.C.E..



fragment of the Papyrus of Turin

The Palermo stele also cites the same list, stating the Heru Sa Aset (Horus) personally reigned

over Kemet.

Egyptian High Priest Manetho (Ma-n-Thoth) of Sebennytos (in the Nile Delta), Master of Secrets at the Great Library of Alexandria in the 3rd century B.C.E., wrote a 30 volume history of Kemet in Greek, the *Aegiptiaca*, that listed these historical and divine pharaohs. Manetho claimed that Thoth personally ruled from 8670 to 7100 B.C.E., “after the night of the battle.”

Manetho’s dates for the historical pharaohs is still used by modern Egyptologists. Manetho dates Kemet to 33,894 B.C.E..

The standing stones at Nabta are estimated to have been erected between 6,400 and 4,900 B.C.E. (more than a thousand years before Stonehenge).



Calendar Circle at Nabta

reciprocity

The earliest known affirmation of the principle of reciprocity is found in the story of the Eloquent Peasant, from the Middle Kingdom: “Now this is the command: Do to the doer to make him do.” This is a reference to the use of the Law of Ma’at.

A Late Period papyrus states: “That which you hate to be done to you, do not do to another.”

Chinese religion

Joseph Needham (a sinologist and historian) stated “the hallucinogenic properties of hemp were common knowledge in Chinese medical and Taoist circles for two millennia or more.”

Joseph Needham and many other scholars associate Chinese *wu* (shamans) with the entheogenic use of cannabis in Central Asian shamanism.

number of believers

The IRS and the courts often consider the size of a religion in determining if a religion is legally valid.

legal standards

“(2) a cult, involving a gregarious association openly expressing the belief;” —*Fellowship of Humanity v. County of Alameda*

“regular congregations,” —IRS definition of a church

religious freedom reply to IRS standards

The arguments against the eleventh criterion's requirement of “regular congregations” are essentially the same as those against the need for a separate church membership outlined above. Congregants who do not “regularly” attend services may nonetheless be considered practicing church members. — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Kemetic or ancient Egyptian religion

The Kemetic or ancient Egyptian religion has had millions of believers over a period of more than 12,500 years!

divinity

The courts often consider the nature of divinity in determining if a religion is legally valid.

legal standards

“(1) a belief, not necessarily referring to supernatural powers;” —*Fellowship of Humanity v. County of Alameda*

“Adherents to many religions believe that there is another dimension, place, mode, or temporality, and they often believe that these places are inhabited by spirits, souls, forces, deities, and other sorts of inchoate or intangible entities.” —*United States of America v David Meyers*

religious freedom reply to IRS standards

In *Torcaso v. Watkins*, the Court broke the theistic mold which had theretofore restricted the American legal definition of religion. According to the Court, the first amendment precluded government from aiding “those religions based on a belief in the existence of God as against those religions founded on different beliefs.” The Court noted that “[a]mong religions in this country which do not teach what would generally be considered a belief in the existence of God are Buddhism, Taoism, Ethical Culture, Secular Humanism and others.” This expanded position reflected a recognition of the great diversity of religious beliefs in modern America. — by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Kemetic or ancient Egyptian religion

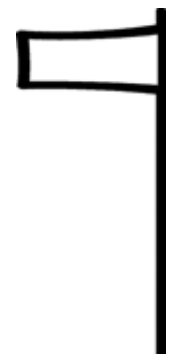
The English word “nature” comes from the Kemetic (ancient Egyptian) word “Ntr”.

Ntr is the Kemetic (ancient Egyptian) name for the Divine. The **neteru** is the ancient Egyptian name for the ancient Egyptian Deities and Goddesses.

Ntr is written in Roman letters as Ntr, Ntr, Neter, Netjer, or Netcher. The underlined t represents the sound tch (or tj).

Ntr is the world’s first written word for the Divine or Supreme Goddess.

The word “deity” is indicated by adding the determinative for male deity to the hieroglyph Ntr. The word “Goddess” is indicated by adding the determinative for female goddess to the hieroglyph Ntr.



Kemetic
(ancient Egyptian)
hieroglyph

for Ntr

The native word for hieroglyphs was Medu Ntr, which literally meant “Divine writing”. The English word “hieroglyph” comes from Greek, which literally meant “sacred writing”.

It was called Divine writing because it was created by Goddess Seshat and provided to humans by Djehuti (Thoth) and Aset (Isis). These are divine acts. Divine acts require the existence of the Kemetic (ancient Egyptian) divine. This is “supernatural power” in action.

The Medu Ntr (hieroglyph) for Ntr looks like a flag because in the pre-dynastic period roadside shrines were marked with long pennant flags on a very tall flagpole.

These shrines for the divine were typically located at reliable water. The tall divine flags, visible for long distances, were markers for divine waters. Thankful and worshipful travellers left offerings at the shrines.

As the North African Great lakes dried up and turned into the Sahara Desert, refugees worshiped and thanked the Kemetic (ancient Egyptian) Divine at the water Goddess shrines marked by the written character for Supreme Goddess.

Particularly divine was Hapi (the Nile River), the only river divinely powerful enough to continue to flow across the Sahara Desert. Hapi (the Nile River) is the most divine waters in the entire world as well as the longest river in the world.

“The word for God and ‘god’ is, from first to last, *neter*, the original meaning of which is unknown.”—E.A. Wallis Budge, *Osiris and the Egyptian Resurrection*, Vol. I, page 350

The **Puat Neteru** are the company of the divine or the ancient Egyptian pantheon.

Goddesses:

Goddess of Cannabis

There are many different Goddesses of Cannabis and Witchcraft from every culture around the world.

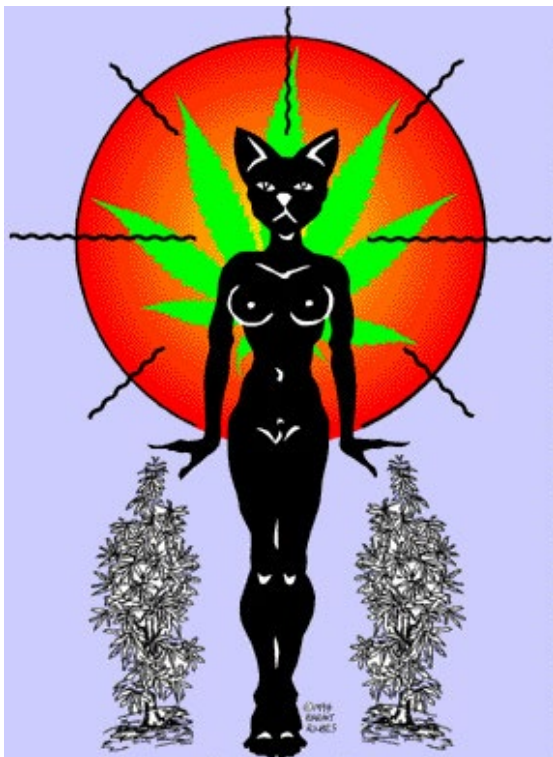
The most important Goddess of Cannabis Witchcraft is Bast (ancient Egyptian name). The center of worship of Bast at Per-Bastet (which the Greeks called Bubastis) in the 18th Sepat (which the Greeks called a nome) of the Nile Delta, Am Khent (which translates as the Prince of the South).



Goddesses:

- Artemis
- Bast
- [Diana](#)
- Easter

Portions of a red granite foundation are all that remain of the world's largest temple, the main Temple of Bast on the main island of the Am Khent sepat.



Bast: Bast, or Bastet, is one of the oldest of the Kemetic neteru. The city of Per-Bastet, capital of the Am Khent sepat (or state), was dedicated to the worship of Bast. Bast is a very complex and complete Goddess. She is often described as the Goddess of cats and usually depicted as a beautiful human woman with the head of a cat. She is also the Goddess of cannabis and every cannabis plant is a physical embodiment of Bast. All followers of Am Khent Kemeticism are required by their religion to honor Bast, cats, and cannabis.

The Greeks called this same Goddess **Artemis**. The Temple of Artemis (or Diana) at Ephesus was one of the seven wonders of the ancient world.

The Romans called this Goddess **Diana**.

The Germans called this Goddess **Easter**. The famous

Germanic holy day of Easter, held on the first day of the sun following the first Full Moon after the Spring (or vernal) Equinox, is a celebration of this Goddess and the return of spring. The use of baskets of grass filled with eggs and carried by a mythical rabbit are all symbols of Easter's role as the primary Goddess of fertility.

Diana

There are many different Goddesses of Cannabis and Witchcraft from every culture around the world.

names

Diana is the Roman version of the magick Goddess of cannabis. Diana is the Queen of Witches.

The Greeks called this same Goddess **Artemis**. The Temple of Diana at Ephesus was one of the seven wonders of the ancient world.

The Egyptians called this Goddess **Bast**.

The Germans called this Goddess **Easter**.

the Wild One

Throughout the Medieval Period in Europe Diana was viewed as the Goddess of the wilderness, the hunt, and wild flora and fauna.

Diana ruled all of the dark forests of Europe throughout the Middle Ages.

From *Aradia*, in The Charge of the Goddess:

“Once in the month, and when the moon is full, ye shall assemble in some desert place, or in a forest all together join to adore the potent spirit of your queen, my mother, great Diana”

The Goddess Diana was channeled by Witches through the use of cannabis smoke. Under the influence of cannabis intoxication, Witches can hear the words of Diana.

Diana is the Wild Goddess who transforms a raging bestial human into a laughing and giggling human. See [laughter](#).

Queen of Witches

One of the primary goals of the Christian Inquisitions was to stamp out worship of Diana. Some scholars think this was the original reason for the Inquisition. The Christian clergy proclaimed that Diana was the Queen of the Witches. Torquemada, an infamous witchhunter and grand Inquisitor, claimed that Diana was [Satan](#).

ultimate ideas

The courts often consider the ultimate ideas of your religion in determining if a religion is legally valid.

legal standards

“(1) addresses fundamental and ultimate questions having to do with deep and imponderable matters;” —*Malnak v. Yogi*

“1. Ultimate Ideas: Religious beliefs often address fundamental questions about life, purpose, and death. As one court has put it, “a religion addresses fundamental and ultimate questions having to do with deep and imponderable matters.” *Africa*, 662 F.2d at 1032. These matters may include existential matters, such as man’s sense of being; teleological matters, such as man’s purpose in life; and cosmological matters, such as man’s place in the universe.” —*United States of America v David Meyers*

Kemetic or ancient Egyptian religion

The Book of the Coming Forth Into the Day (better known as the Egyptian Book of the Dead) provides the most complete description of the afterlife and the path to the afterlife of any religion in the entire world.

comprehensiveness of beliefs

The courts often consider the comprehensiveness of your religious beliefs in determining if a religion is legally valid.

legal standards

“(2) is part of a religion that is comprehensive in nature and consists of a belief system as opposed to an isolated teaching;” —*Malnak v. Yogi*

“4. Comprehensiveness of Beliefs: Another hallmark of “religious” ideas is that they are comprehensive. More often than not, such beliefs provide a telos, an overreaching array of beliefs that coalesce to provide the believer with answers to many, if not most, of the problems and concerns that confront humans. In other words, religious beliefs generally are not confined to one question or a single teaching. Africa, 662 F.2d at 1035.” —*United States of America v David Meyers*

“a recognized creed and form of worship,” —IRS definition of a church

“a formal code of doctrine and discipline,” —IRS definition of a church

religious freedom reply to IRS standards

The second criterion is flawed because recognized creed and form of worship is sometimes imperceptible even in major denominations. The Unitarian Universalists, for example, a denomination of approximately 200,000 members, follows

No formal or central creed. Their ministers and members are not required to pass any test of faith. Freedom of belief among Unitarians is broad enough to include agnosticism, humanism, even atheism, on the one hand, and, on the other, a belief in God which can be manifested in a wide range of definitions - from that of a “personal god” to an “Ultimate Reality.” May Unitarians feel the word “God” a stumbling block to communication about the supreme matters of the spirit. They choose to avoid an excessive use of all words that stand in the way of, instead of encouraging, profound understanding.

Unitarians feel that “[t]here is clearly a pride in being creedless, in having open membership.” Moreover, a religious body may believe only in doing “whatever is right.” A “recognized” form of worship as a criteria immerses the IRS in intractable sectarian strife. The form of worship may vary significantly among churches within the same denomination.

Some forms of Unitarian worship resemble services in other Protestant churches. In one city, a Unitarian church may have the atmosphere of a Lutheran or Episcopalian or Congregationalist service. Each church is free to develop a service of worship that best serves its people, and Unitarian ministers through long tradition are accorded the right of a free pulpit. Unitarians employ many variations of the great human-divine theme of religion as expressed in meditation, music and poetry.

Furthermore, commentators note that a Quaker meeting for worship has no fixed, pre-arranged character. It is held without ritual or an ordained minister, and with no outward sacraments or formalized program. It takes place in a meeting house without a steeple, stained-glass windows, alter, credos or organ It should be emphasized that the form of Quaker worship and ministry is not prescribed or uniform.

The Plymouth Brethren “oppose formalism in worship and have no liturgy.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

The fourth requirement, that a church have a formal code of doctrine and discipline, may contradict a fundamental tenet of an organization that it have “no traditional doctrine.” For example, the Quakers do not have a “written or spoken formal creed The Society never requires of its members the acceptance of any formula or belief.” The Plymouth Brethren “oppose man made creeds as being human additions to the Word of God. Many other evangelicals share this view.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Kemetic or ancient Egyptian religion

The Great Library at Alexandria was a temple of Pr Ntr Kmt (Kemetic Witchcraft), headed by a High Priestess of Aset (Isis) or High Priest of Ptah or High Priest of Serapis.

Pr Ntr Kmt, ancient Egyptian Witchcraft, invented mathematics, including algebra, geometry, trigonometry (Imhoteop), and calculus (Hypatia, although her writings were destroyed by devout Christians after the author of the Nicean Creed (the mainstream Christian creed) joined with other Bishops and monks to gang-rape, torture, and murder Hypatia).

Pr Ntr Kmt invented science, including astronomy/astrology, chemistry/alchemy, botany/biology, medicine, and physics. The word “chemistry” is based on the name Khem. Imhotep (chief architect of the Great Pyramids and High Priest of Ptah) created the scientific method. Most of the Western and Hindu astrological signs are from the Egyptian divine: Ares=Amon-Ra, Taurus=Ptah, Gemini=Heru and Bast, Leo=Sekhmet, Virgo=Seshat and Aset, Libra=Ma’at, Scorpio-Selkhet, Aquarius=Hapi. Ramses the Great set the four cardinal points (Ares, Cancer, Libra, and Capricorn) in the sky.

More than 2/3rds of the modern medications in use today (by total consumption) are direct derivatives of the herbal remedies created by ancient Egyptian Witches.

philosophy
mathematics
science

philosophy

Many courts claim that philosophy is different than religion. This is a specifically Roman Catholic belief in origin (to allow the Roman Catholic Church to use philosophy, especially Aristotle, without using the religions, especially Hellenism and the Kemetic religion). The Kemetic (ancient Egyptian) religion invented philosophy as an integral part of the religion. Many other world religions include philosophy.

legal standards

“(2) is part of a religion that is comprehensive in nature and consists of a belief system as opposed to an isolated teaching;” —*Malnak v. Yogi*

“4. Comprehensiveness of Beliefs: Another hallmark of “religious” ideas is that they are comprehensive. More often than not, such beliefs provide a telos, an overreaching array of beliefs that coalesce to provide the believer with answers to many, if not most, of the problems and concerns that confront humans. In other words, religious beliefs generally are not confined to one question or a single teaching. Africa, 662 F.2d at 1035.” —*United States of America v David Meyers*

“a recognized creed and form of worship,” —IRS definition of a church

“a formal code of doctrine and discipline,” —IRS definition of a church

religious freedom reply to IRS standards

The fourth requirement, that a church have a formal code of doctrine and discipline, may contradict a fundamental tenet of an organization that it have “no traditional doctrine.” For example, the Quakers do not have a “written or spoken formal creed The Society never requires of its members the acceptance of any formula or belief.” The Plymouth Brethren “oppose man made creeds as being human additions to the Word of God. Many other evangelicals share this view.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Kemetic or ancient Egyptian religion

The Greeks (including famous Greek philosophers) believed that the origin of Greek philosophy was earlier Kemetic (ancient Egyptian) philosophy.

An example from the Shabaka stela:

There comes into being in the heart; there comes into being by the tongue as the

image of Atum! Ptah is the very great, who gives life to all the neteru and their kas. It is all in this heart and by this tongue.

His [Ptah's] Puat [Ennead] is before him as heart, authoritative utterance, teeth, semen, lips, and hands of Atum. This Puat [Ennead] of Atum came into being through his semen and through his fingers. Surely, this Puat [Ennead of Ptah] is the teeth and the lips in the mouth, proclaiming the name of all things, from which Shu and Tefwt came forth as him, and which gave birth to the Puat [Ennead of Ptah]. The sight of the eyes, the hearing of the ears, and the breathing of air through the nose, they transmit to the heart, which brings forth every decision. Indeed, the tongue thence repeats what is in front of the heart. Thus was given birth to all the neteru. His [Ptah's] Puat [Ennead] was completed. Lo, every word of the Ntr came into being through the thoughts in the heart and the command by the tongue. Thus all the faculties were made and all the qualities determined, they that make all foods and all provisions, through this word. [Life] to him who does what is loved, [death] to him who does what is hated. Thus life is given to the peaceful and death is given to the criminal. Thus all labor, all crafts, the action of the arms, the motion of the legs, the movements of all the limbs, according to this command which is devised by the heart and comes forth by the tongue and creates the performance of everything.

Ronald L. Bonewitz, PhD, geologist, wrote in his 1998 book *hieroglyphics* "Egyptian [the language] comes from a system of thought somewhat closer [than Mayan hieroglyphs] to modern thought; indeed, it may be argued that modern thought is a direct [descendant] of Egyptian thought."

mathematics

The courts often consider the ultimate ideas of your religion in determining if a religion is legally valid.

legal standards

“(1) addresses fundamental and ultimate questions having to do with deep and imponderable matters;” —*Malnak v. Yogi*

“1. Ultimate Ideas: Religious beliefs often address fundamental questions about life, purpose, and death. As one court has put it, “a religion addresses fundamental and ultimate questions having to do with deep and imponderable matters.” *Africa*, 662 F.2d at 1032. These matters may include existential matters, such as man’s sense of being; teleological matters, such as man’s purpose in life; and cosmological matters, such as man’s place in the universe.” —*United States of America v David Meyers*

Kemetic or ancient Egyptian religion

Egypt was the source of mathematics. Geometry and algebra have their ancient roots in Kemet. Imhotep developed trigonometry. Hypatia developed calculus (although her work was destroyed in antiquity by the Christians).

numbers

The courts often consider the ultimate ideas of your religion in determining if a religion is legally valid.

legal standards

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Kemetic or ancient Egyptian religion

Compare the Egyptian number system with the more famous Hindu (Arabic) number system:

1	2	3	4	5	6	7	8	9
—	=	≡	+	h	4	7	5	7
Brahmi numerals around 1st century A.D.								

1	10	100	1000
2	20	200	2000
3	30	300	3000
4	40	400	4000
5	50	500	5000
6	60	600	6000
7	70	700	7000
8	80	800	8000
9	90	900	9000
Hieratic numerals			

1	10	100	1000	10000	100000	10 ⁶
Egyptian numeral hieroglyphs						

1/3

science

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Kemetic or ancient Egyptian religion

Egypt was the source of science. Chemistry is actually named for the ancient Egyptian diety Khem. Imhotep developed the scientific method.

Modern American courts have adopted the Christian claim that science and religion are entirely separate fields and will reject any religious claims that include any science.

These Christian judges are overlooking the fact that the Orthodox and Roman Catholic Churches were the source of thie religious claim that science and religion are separated. This claim was made so that the Christians could use ancient Egyptian and Hellenistic science without “polluting” their new religion with older, more respected religions.

It was Christian zealots that separated astrology from astronomy, alchemy from chemistry, and other similar artificial religious beliefs.

Science was always an intrinsic part of the ancient Egyptian religion. Science was the ancient Egyptian religion’s method for explaining how the universe works.

metaphysical beliefs

The courts often consider the existence of metaphysical beliefs in determining if a religion is legally valid.

legal standards

“(1) addresses fundamental and ultimate questions having to do with deep and imponderable matters;” —*Malnak v. Yogi*

“2. Metaphysical Beliefs: Religious beliefs often are ;“metaphysical;,” that is, they address a reality which transcends the physical and immediately apparent world. Adherents to many religions believe that there is another dimension, place, mode, or temporality, and they often believe that these places are inhabited by spirits, souls, forces, deities, and other sorts of inchoate or intangible entities.” —*United States of America v David Meyers*

Kemetic or ancient Egyptian religion

The Book of the Coming Forth Into the Day (better known as the Egyptian Book of the Dead) provides the most complete description of the afterlife and the path to the afterlife of any religion in the entire world.

Ronald L. Bonewitz, PhD, geologist, wrote in his 1998 book *hieroglyphics* “Egyptian [the language] comes from a system of thought somewhat closer [than Mayan hierglyphs] to modern thought; indeed, it may be argued that modern thought is a direct [descendant] of Egyptian thought.”

Naomi Ozaniec calls Atum, Neith (Athena), and Ra “metaphysical” Neteru.

creation

Beliefs about creation are a metaphysical belief.

The courts often consider the existence of metaphysical beliefs in determining if a religion is legally valid.

legal standards

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Kemetic or ancient Egyptian religion

Cosmic Orgasm

the Cosmic Orgasm

The ancient Egyptians had hundreds of creation stories, in part because each of the major regional deities had their own creation myths before Egypt became the world's first nation, but also because the ancient Egyptians recognized that their creation myths were metaphors for basic truths and they had plenty of room for additional creation truth.

One of the major ancient Egyptian creation myths was about the Cosmic Orgasm.

Originally there was the Chaos of Nun, a nether void without organization or theme.

In the Chaos of Nun, the Cosmic Egg came into existence. The Cosmic Egg was the safe place for the combined deity Sekhmet-Bast. Among their many roles, the Goddesses Sekhmet and Bast represented the dichotomy of creation (Bast) and destruction (Sekhmet).

After untold time the combined Goddess Sekhmet-Bast became lonely, so She split into two

Goddesses, Sekhmet and Bast.

The two Goddesses showered each other with love, engaging in lesbian sex in the Cosmic Egg.

Their love was so great that they caused the Cosmic Egg to grow so large that the Cosmic Lotus had to come into existence just to support the weight.

As the intensity of their lesbian sex grew, so did the Cosmic Egg and the Cosmic Lotus, emerging from the Chaos of Nun.

In a blinding burst of light (Ra), Cosmic Orgasm burst open the Cosmic Egg, parting the Chaos of Nun and creating the universe.

Puat or Ennead Sacred Nine

An example from the Leyden Papyrus of Qenna:

All the neteru are three: Amun, Re, and Ptah, who have no equals. He whose nature [literally “whose name”] is mysterious, being Amun; Ra is the head, Ptah the body. Their cities on earth, established forever are: Thebes, Heliopolis, and Memphis [stable] for eternity. When a message comes from heaven, it is heard at Heliopolis, it is repeated at Memphis to Ptah, and it is made into a letter written in the letters of Thoth [at Hermopolis] for the city of Amun [Thebes].

after life

Beliefs about the after life are a metaphysical belief.

The courts often consider the existence of metaphysical beliefs in determining if a religion is legally valid.

legal standards

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Kemetic or ancient Egyptian religion

The Book of the Coming Forth Into the Day (better known as the Egyptian Book of the Dead) provides the most complete description of the afterlife and the path to the afterlife of any religion in the entire world.

The ancient Egyptians believed in an **otherworld** and a life after death.

Ancient Egyptians believed that life on earth was one part of an eternal journey. To be worthy of the Egyptian equivalent of heaven, one had to live a life that upheld the principle of ma'at.

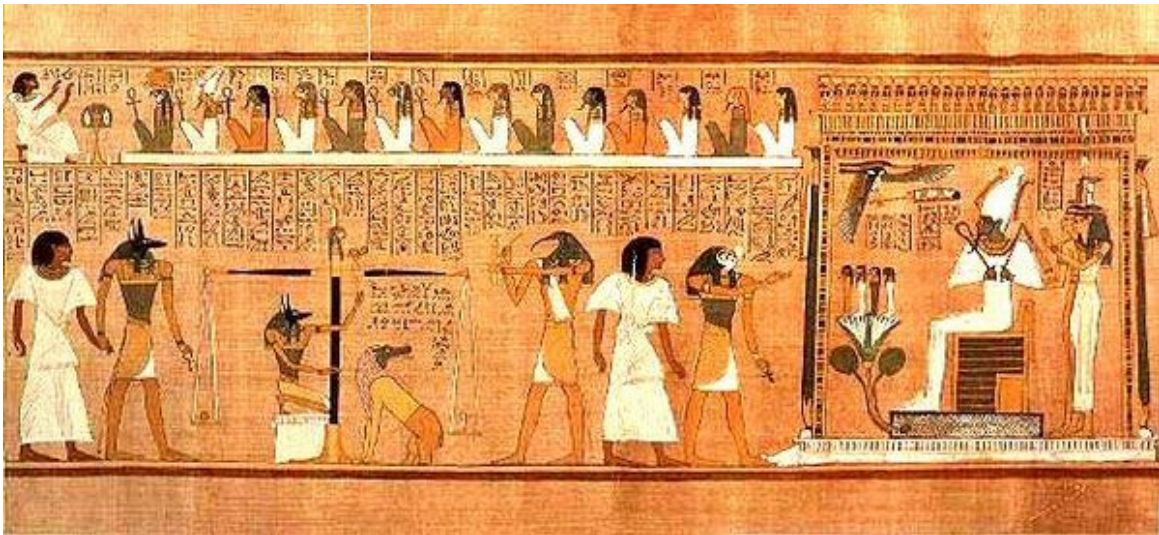


dw3t

hieroglyphs courtesy of [Jim Loy](#)

The ancient Egyptians believed that the otherworld (netherworld or land of the dead or land of the west) was similiar to the Nile valley and delta.

The ancient Egyptians believed that the otherworld was divided into two areas, one for the good and one for the bad, making the good portion a paradise. These were the forerunners of the idea of heaven and hell.



After the New Kingdom, the ancient Egyptians believed that the good portion was further divided into seven valleys, ranked by how good one was during life (with the possibility to advance or fall back based on activity during the after life).



courtesy of Mattia Mancini @DjedMedu

Aaru

Aaru, or the Field of Reeds, is the name for heavenly paradise in Egyptian mythology. Ruled over by Asar (Osiris), an Egyptian god, the location has been described as the ka of the Nile Delta.

Deities of the Twenty-One Secret Portals Of The Mansion Of Osiris In The Field Of Reeds

Name of Portal as Goddess	Guardian God
1 "Mistress Of Trembling"	"Dreadful"
2 "Mistress Of The Sky"	"Born Of The Hindquarters"
3 "Mistress Of The Altar"	"Cleanser"
4 "Powerful Of Knives"	"Long-Horned Bull"
5 "Fiery One"	"Killer Of Opponents"
6 "Mistress Of Darkness"	"Destroyer"
7 "Veiler Of The Weary One (Asar)"	"Ikenti"
8 "Lighter Of Flames & Extinguisher Of Heat"	"Protector Of His Body"
9 "Foremost"	"Fowler"
10 "Piercing Of Voice" or "High Of Double Doors"	"Great Embracer"
11 "Ceaseless In Knifing & Scorcher Of Rebels"	"Cook Of His Braziers"
12 "Invoked By Her Two Lands"	"Cat"
13 "She Above Whom Osiris (or: Isis, Ennead) Stretches His Arms"	"Destroyer Of The Robber"
14 "Mistress Of Anger & Dancing On Blood"	"Screecher"
15 "Great Of Valour"	"Vigilant Of Face"
16 "Dread"	"Clever In Bowing"

17	"Great On The Horizon"	"Spirit"
18	"Lover Of Heat"	"Anointed"
19	"She Who Foretells Mornings Throughout Her Lifespan & Possessor Of The Writings of Thoth"	nameless
20	"Dweller Within the Cavern Of Her Lord"	nameless
21	"Sharpener Of Flint To Speak For Her"	"Giraffe" ("Memy")

ethical system

The courts often consider the existence of a moral or ethical system in determining if a religion is legally valid.

legal standards

“(3) a system of moral practice directly resulting from an adherence to the belief;”
—*Fellowship of Humanity v. County of Alameda*

“3. Moral or Ethical System: Religious beliefs often prescribe a particular manner of acting, or way of life, that is “moral” or “ethical.” In other words, these beliefs often describe certain acts in normative terms, such as “right and wrong,” “good and evil,” or “just and unjust.” The beliefs then proscribe those acts that are “wrong,” “evil,” or “unjust.” A moral or ethical belief structure also may create duties--duties often imposed by some higher power, force, or spirit--that require the believer to abnegate elemental self-interest.” —*United States of America v David Meyers*

“a formal code of doctrine and discipline,” —IRS definition of a church

Rasta

Rastafari completely rejects the standards and structure of Western society and colonialism as being a corrupt and downpressive “Babylonian” system.

Marcus Garvey was later viewed as an important Rasta prophet for speaking out against the system of Babylon.

Kemetic or ancient Egyptian religion

An example from the Shabaka stela:

There comes into being in the heart; there comes into being by the tongue as the image of Atum! Ptah is the very great, who gives life to all the neteru and their kas. It is all in this heart and by this tongue.

His [Ptah's] Puat [Ennead] is before him as heart, authoritative utterance, teeth, semen, lips, and hands of Atum. This Puat [Ennead] of Atum came into being through his semen and through his fingers. Surely, this Puat [Ennead of Ptah] is the teeth and the lips in the mouth, proclaiming the name of all things, from which Shu and Tefwt came forth as him, and which gave birth to the Puat [Ennead of Ptah]. The sight of the eyes, the hearing of the ears, and the breathing of air through the nose, they transmit to

the heart, which brings forth every decision. Indeed, the tongue thence repeats what is in front of the heart. Thus was given birth to all the neteru. His [Ptah's] Puat [Ennead] was completed. Lo, every word of the Ntr came into being through the thoughts in the heart and the command by the tongue. Thus all the faculties were made and all the qualities determined, they that make all foods and all provisions, through this word. [Life] to him who does what is loved, [death] to him who does what is hated. Thus life is given to the peaceful and death is given to the criminal. Thus all labor, all crafts, the action of the arms, the motion of the legs, the movements of all the limbs, according to this command which is devised by the heart and comes forth by the tongue and creates the performance of everything.

reciprocity

The earliest known affirmation of the principle of reciprocity is found in the story of the Eloquent Peasant, from the Middle Kingdom: "Now this is the command: Do to the doer to make him do." This is a reference to the use of the Law of Ma'at.

A Late Period papyrus states: "That which you hate to be done to you, do not do to another."

external signs

The courts often consider the existence of external signs in determining if a religion is legally valid.

legal standards

“(3) can be recognized by the presence of certain formal and external signs.” —*Malnak v. Yogi*

The Constitutional Court of South Africa in *Prince v The President of the Law Society of the Cape of Good Hope and Others* 2002(2) SA 794 (SA) (see also *Prince v President of the Cape Law Society and Others* 2001 (2) SA 388 (SA)) ruled against religious cannabis use by Rastafari because there “is no objective way in which a law enforcement official could distinguish between the use of cannabis for religious purposes and the use of cannabis for recreation” (para. 130).

accoutrements of religion

The courts often consider the existence of accoutrements of religion in determining if a religion is legally valid.

legal standards

“5. Accoutrements of Religion: By analogy to many of the established or recognized religions, the presence of the following external signs may indicate that a particular set of beliefs is “religious”.” —*United States of America v David Meyers*

statues

The courts often consider the existence of statues in determining if a religion is legally valid.

legal standards

“5. Accoutrements of Religion: By analogy to many of the established or recognized religions, the presence of the following external signs may indicate that a particular set of beliefs is “religious”:” —*United States of America v David Meyers*

Kemetic or ancient Egyptian religion

Sphinx

the Sphinx

The courts often consider the existence of statues in determining if a religion is legally valid.

legal standards

“5. Accoutrements of Religion: By analogy to many of the established or recognized religions, the presence of the following external signs may indicate that a particular set of beliefs is “religious”:” —*United States of America v David Meyers*

Kemetic or ancient Egyptian religion

The Sphinx is near the Great Pyramids in Egypt.

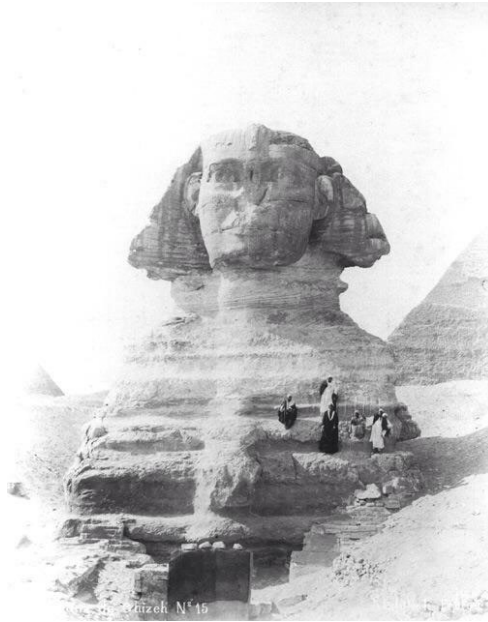


Photo of the Great Sphinx, Giza, Egypt, 1886 by Abdullah Frères

prophet

The courts often consider the existence of a founder, prophets, or teachers in determining if a religion is legally valid.

legal standards

“5. a. Founder, Prophet, or Teacher: Many religions have been wholly founded or significantly influenced by a deity, teacher, seer, or prophet who is considered to be divine, enlightened, gifted, or blessed.” —*United States of America v David Meyers*

sacred writings

The courts often consider the existence of important writings in determining if a religion is legally valid.

legal standards

“5. b. Important Writings: Most religions embrace seminal, elemental, fundamental, or sacred writings. These writing often include creeds, tenets, precepts, parables, commandments, prayers, scriptures, catechisms, chants, rites, or mantras.” —*United States of America v David Meyers*

“a literature of its own,” —IRS definition of a church

religious freedom reply to IRS standards

It is unlikely that an ethnic or tribal religion will have “a literature of its own,” as required by the IRS’ ninth criterion. Oral tradition and participation are the means of transferring the religion between generations in such groups. Among the American Indians, there is an “absence of recorded dogma.” One federal court has held that whether a religious organization has extensive literature is not constitutionally dispositive. If relied upon by the IRS, this test would tend to favor more established, traditional, articulate and intellectual churches. — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

writings

proverbs
music

Kemetic or ancient Egyptian religion

The ancient Egyptian religion is deeply embedded in Western culture, as well as African, European, Asian, Chinese, and Indian culture. The religion is deeply embedded into the English language itself.

Ancient Egyptian religious writings are the oldest known writing in the entire world. The oldest discovered written character is the ankh, which appears on cliff paintings and cliff carvings that are more than 12,000 years old. With the same meaning as the word ankh still has

today.

The Book of the Coming Forth Into the Day (better known as the Egyptian Book of the Dead) provides the most complete description of the afterlife and the path to the afterlife of any religion in the entire world.

Many alphabets are derived from ancient Egyptian writing, including the Roman alphabet, Greek alphabet, Germanic runes, and Arabic alphabet.

The oldest known fiction writing was the story of Cinderella, originally a story about an ancient Egyptian princess.

The Great Library at Alexandria was a temple of Pr Ntr Kmt, headed by a High Priestess of Aset (Isis) or High Priest of Ptah.

Ntr Sentra poem

*Mau Bast! Mau Bast!
A Basti, per em setat,
erta-na chu em asui
neter sentra semu hena net'emmit,
hetep ab em asui tau heqt.*

Translation:

Hail Bast! Hail Bast!

Hail Bast, coming forth from the secret place,
may there be given to me splendor in the place
of **incense** (cannabis smoke), herbs, and love-joys,
peace of heart in the place of bread and beer.

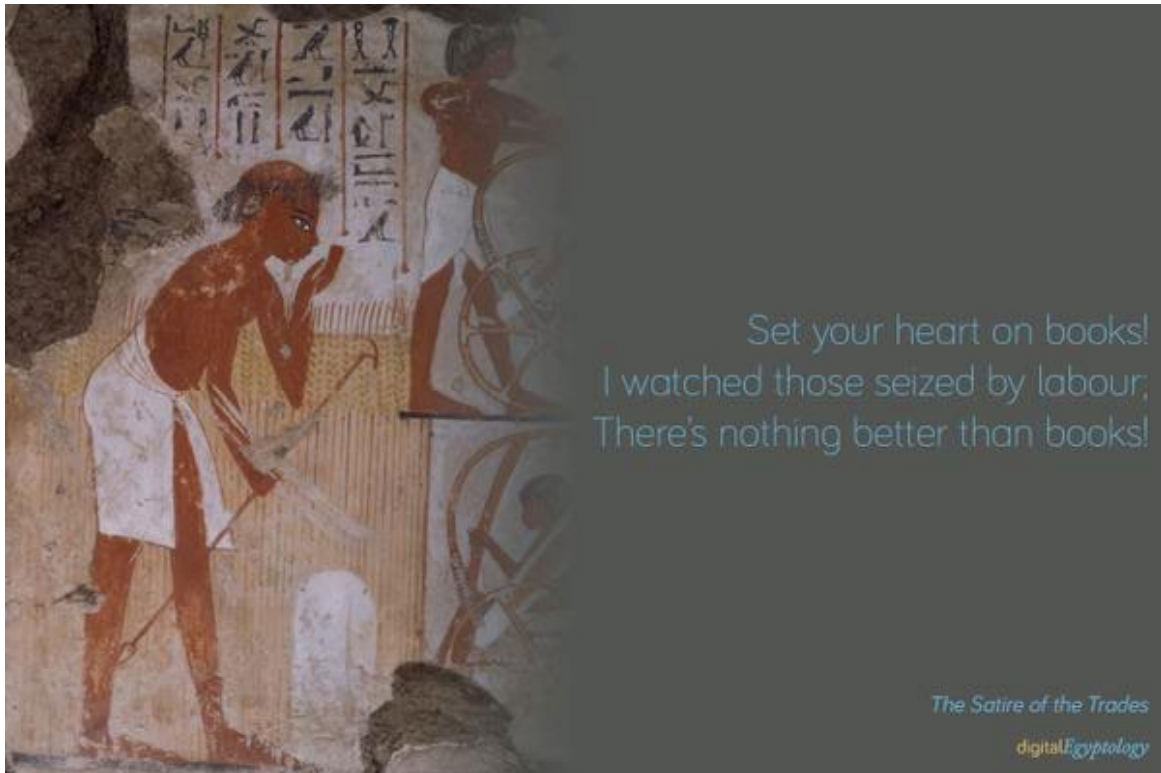
scribes

The following passages are from the Middle Kingdom compilation *Satire of the Trades*, also called *The Instruction of Dua-Kheti*, written by Tjaru (also called Duau Khety) for his son Pepy sometime between 1950-1900 B.C.E. in early Dynasty 12. This work extolled the virtues of being a scribe and put down other occupations, especially manual labor, with biting satire. The book was used throughout the New Kingdom to train scribes, who copied the pages to learn to write.

“I have seen many beatings ...
Set your heart on books!
I watched those recruited for labor —
There’s nothing better than books!
It’s like a boat on the water.

Read the end of the Kemit Book,
You'll find this saying there:
'A scribe at whatever post in town,
He will not suffer in it;
As he fills another's need,
he will not lack rewards'."

"They gave themselves the scroll as lector-priest,
The writing-board as loving son.
Instructions are their tombs,
The reed pen is their child,
The stone surface their wife.
People great and small
Are given them as children,
For the scribe, he is their leader."



Ancient Egyptian proverbs

Wine, women, and food give gladness to the ab (heart). —kemetic (ancient Egyptian) Scribal Texts

The best and shortest road towards knowledge of Ma'at (truth) is Nature. —Proverb of the Outer Temple of Luxor

For every joy there is a price to be paid. —Proverb of the Outer Temple of Luxor

If his ab (heart) rules him, his conscience will soon take the place of the rod. —Proverb of the Outer Temple of Luxor

What you are doing does not matter so much as what you —Proverb of the Outer Temple of ancient Egypt

The kingdom of heaven is within you; and whosoever shall know himself/herself shall find it. —Proverb of the Outer Temple of ancient Egypt

It is better not to know and to know that one does not know, than presumptuously to attribute some random meaning to symbols. —Proverb of the Outer Temple of Luxor

If you search for the laws of harmony, you will find knowledge. —Proverb of the Outer Temple of Luxor

If you are searching for a Neter (Goddess), observe Nature. —Proverb of the Outer Temple of Luxor

Exuberance is a good stimulus towards action, but the inner light grows in silence and concentration. —Proverb of the Outer Temple of Luxor

Not the greatest Master can go even one step for his disciple, in himself he must experience each stage of developing consciousness. Therefore he will know nothing for which he is not ripe. —Proverb of the Outer Temple of Luxor

The body is the Per (house) of Neter (Goddess). —Proverb of the Outer Temple of ancient Egypt

True teaching is not an accumulation of knowledge; it is an awakening of consciousness which goes through successive stages. —Proverb of the Outer Temple of Luxor

The man who knows how to lead one of his brothers towards what he has known may one day be saved by that very brother. —Proverb of the Outer Temple of Luxor

People bring about their own undoing through their tongues. —Proverb of the Outer Temple of Luxor

If one tries to navigate unknown waters one runs the risk of shipwreck. —Proverb of the Outer Temple of Luxor

Leave him in error who loves his error. —Proverb of the Outer Temple of Luxor

Every man is rich in excuses to safeguard his prejudices, his instincts, and his opinions. —Proverb of the Outer Temple of Luxor

To know means to record in one's memory; but to understand means to blend with the thing and to assimilate it oneself. —Proverb of the Outer Temple of ancient Egypt

There are two kinds of error: blind credulity and piecemeal criticism. —Proverb of the Outer Temple of Luxor

Never believe a word without putting its truth to the test. —Proverb of the Outer Temple of Luxor

Discernment does not grow in laziness. —Proverb of the Outer Temple of Luxor

Sound skepticism is the necessary condition for good discernment, but piecemeal criticism is an error. —Proverb of the Outer Temple of Luxor

Love is one thing, knowledge is another. —Proverb of the Outer Temple of Luxor

True sages are those who give what they have, without meanness and without secret. —Proverb of the Outer Temple of Luxor

An answer brings no illumination unless the question has matured to the point where it gives rise to this answer which thus becomes its fruit. —Proverb of the Outer Temple of Luxor

What reveals itself to me ceases to be mysterious for me alone; if I unveil it to anyone else, he hears mere words which betray the living sense. —Proverb of the Outer Temple of Luxor

The first concerning the “secrets”; all cognition comes from inside; we are therefore initiated only by ourselves, but the Master gives the keys. —Proverb of the Outer Temple of Luxor

The second concerning the “way”; the seeker has need of a Master to guide him and lift him when he fails, to lead him back to the right way when he strays. —Proverb of the Outer Temple of Luxor

Understanding develops by degrees. —Proverb of the Outer Temple of Luxor

As to the deserving, know that the gift of Heaven is free. —Proverb of the Outer Temple of Luxor

If the Master teaches what is error, the disciple's submission is slavery; if he teaches truth, this submission is ennoblement. —Proverb of the Outer Temple of Luxor

There grows no wheat where there is no grain. —Proverb of the Outer Temple of Luxor

The only thing that is humiliating is helplessness. —Proverb of the Outer Temple of ancient Egypt

An answer is profitable in proportion to the intensity of the quest. —Proverb of the Inner Temple of Luxor

Listen to your convictions, even if they seem absurd to your reason. —Proverb of the Inner Temple of Luxor

Know the world in yourself. Never look for yourself in the world, for this would be to project your illusion. —Proverb of the Inner Temple of Luxor

To teach one must know the nature of those whom one is teaching. —Proverb of the Inner Temple of Luxor

In every vital activity it is the path that matters. —Proverb of the Inner Temple of Luxor

The way of knowledge is narrow. —Proverb of the Inner Temple of Luxor

Each truth you learn will be, for you, as new as if it had never been written. —Proverb of the Inner Temple of Luxor

The only active force that arises out of possession is fear of losing the object of possession. —Proverb of the Inner Temple of Luxor

If you defy an enemy by doubting his courage, you double it. —Proverb of the Inner Temple of Luxor

The nut doesn't reveal the tree it contains. —Proverb of the Inner Temple of Luxor

Peace is an indispensable condition for gaining knowledge. —Proverb of the Inner Temple of Luxor

The first thing necessary in teaching is a Master; the second is a pupil capable of carrying on the tradition. —Proverb of the Inner Temple of Luxor

Peace is the fruit of activity, not of sleep. —Proverb of the Inner Temple of Luxor

Envious greed must govern to possess and ambition must possess to govern. —Proverb of the Inner Temple of Luxor

When the governing class isn't chosen for quality, it is chosen for material wealth; this always

means decadence, the lowest stage a society can reach. —Proverb of the Inner Temple of Luxor

Two tendencies govern human choice and effort, the search after quantity and the search after quality. They classify mankind. Some follow Ma'at, others seek the way of animal instinct. —Proverb of the Inner Temple of ancient Egypt

Qualities of a moral order are measured by deeds. —Proverb of the Inner Temple of ancient Egypt

One foot isn't enough to walk with. —Proverb of the Inner Temple of Luxor

Our senses serve to affirm, not to know. —Proverb of the Inner Temple of Luxor

We mustn't confuse mastery with mimicry, knowledge with superstitious ignorance. —Proverb of the Inner Temple of Luxor

Physical consciousness is indispensable for the achievement of knowledge. —Proverb of the Inner Temple of Luxor

A man can't be judge of his neighbor's intelligence. His own vital experience is never his neighbor's. —Proverb of the Inner Temple of Luxor

No discussion can throw light if it wanders from the real point. —Proverb of the Inner Temple of Luxor

Your body is the Pr (temple) of knowledge. —Proverb of the Inner Temple of Luxor

Experience will show you, a Master can only point the way. —Proverb of the Inner Temple of Luxor

A house has the character of a man who lives in it. —Proverb of the Inner Temple of Luxor

All organs work together in the functioning whole. —Proverb of the Inner Temple of Luxor

A man's ab (heart) is his own Neter (Goddess). —Proverb of the Inner Temple of Luxor

A pupil may show you by his own efforts how much he deserves to learn from you. —Proverb of the Inner Temple of Luxor

Routine and prejudice distort vision. —Proverb of the Inner Temple of Luxor

Each man thinks his own horizon is the limit of the world. —Proverb of the Inner Temple of Luxor

You will free yourself when you learn to be neutral and follow the instructions of your ab (heart) without letting things perturb you. This is the way of Ma'at. —Proverb of the Inner Temple of ancient Egypt

Judge by cause, not by effect. —Proverb of the Inner Temple of ancient Egypt

Growth in consciousness doesn't depend on the will of the intellect or its possibilities but on the intensity of the inner urge. —Proverb of the Inner Temple of ancient Egypt

Every man must act in the rhythm of his time. —Proverb of the Inner Temple of ancient Egypt

Man needs images. —Proverb of the Inner Temple of Luxor

Ma'at, who links universal to terrestrial, the divine with the human, is incomprehensible to the cerebral intelligence. —Proverb of the Inner Temple of Luxor

Have the wisdom to abandon the values of a time that has passed and pick out the constituents of the future. —Proverb of the Inner Temple of Luxor

An environment must be suited to the age and men to their environment. —Proverb of the Inner Temple of Luxor

Everyone finds himself in the world where he belongs. —Proverb of the Inner Temple of Luxor

Always watch and follow Nature. —Proverb of the Inner Temple of Luxor

A phenomenon always arises from the interaction of complementaries. Set causes Heru (Horus). Heru (Horus) redeems Set. —Proverb of the Inner Temple of Luxor

All seed answers light, but the color is different. —Proverb of the Inner Temple of Luxor

The plant reveals what is in the seed. —Proverb of the Inner Temple of Luxor

Popular beliefs on essential matters must be examined in order to discover the original thought. —Proverb of the Inner Temple of Luxor

It is the passive resistance from the helm that steers the boat. —Proverb of the Inner Temple of Luxor

The key to all problems is the problem of consciousness. —Proverb of the Inner Temple of Luxor

Man must learn to increase his sense of responsibility and of the truth that everything he does will have its consequences. —Proverb of the Inner Temple of Luxor

If you would build something solid, don't work with wind; always look for a fixed point, something you know that is stable ... yourself. —Proverb of the Inner Temple of Luxor

If you would know yourself, take yourself as starting point and go back to its source, your

beginning (natal chart) will disclose your end. —Proverb of the Inner Temple of Luxor

Images are nearer reality than cold definitions. —Proverb of the Inner Temple of Luxor

Seek peacefully, you will find. —Proverb of the Inner Temple of Luxor

Organization is impossible unless those who know the laws of harmony lay the foundation. —Proverb of the Inner Temple of Luxor

It is no use whatever preaching Wisdom to men; you must inject it into their blood. —Proverb of the Inner Temple of Luxor

Knowledge is consciousness of reality. Reality is the sum of the laws that govern nature and of the causes from which they flow. —Proverb of the Inner Temple of Luxor

Social good is what brings peace to family and society. —Proverb of the Inner Temple of Luxor

Knowledge is not necessarily wisdom. —Proverb of the Inner Temple of Luxor

By knowing one reaches belief. By doing one reaches conviction. When you know, dare. —Proverb of the Inner Temple of Luxor

Altruism is the mark of a superior being. —Proverb of the Inner Temple of Luxor

All is within yourself. Know your most inward self and look for what corresponds with it in nature. —Proverb of the Inner Temple of Luxor

The seed cannot sprout upwards without simultaneously sending roots into the ground. —Proverb of the Inner Temple of Luxor

The seed includes all the possibilities of the tree. The seed will develop these possibilities, however, only if it receives corresponding energies from the sky. —Proverb of the Inner Temple of Luxor

Grain must return to the earth, die, and decompose for new growth to begin. —Proverb of the Inner Temple of Luxor

Know thyself and thou shalt know the Neteru (Deities). —Proverb of the Inner Temple of Luxor

A blow is repaid by the like of it, and all that is achieved is a hitting. —Kemetic (ancient Egyptian) Scribal Texts

Do not drink water in the house of a merchant; he will charge you for it. —Kemetic (ancient Egyptian) Scribal Texts

Empty not your soul to everybody and do not diminish thereby your importance. —Kemetic (ancient Egyptian) Scribal Texts

For everyone there is an appointed time. —Kemetic (ancient Egyptian) Scribal Texts

Neter (Goddess) loves him who cares for the poor more than him who respects the wealthy. —Kemetic (ancient Egyptian) Scribal Texts

Inquire about everything that you may understand it, be good tempered and magnanimous. —Kemetic (ancient Egyptian) Scribal Texts

One who is serious all day will never have a good time, while one who is frivolous all day will never establish a household. —Kemetic (ancient Egyptian) Scribal Texts

Wine, women, and food give gladness to the ab (heart). —Kemetic (ancient Egyptian) Scribal Texts

A beautiful thing is never perfect. —Kemetic (ancient Egyptian) Scribal Texts

Because we focused on the snake, we missed the scorpion. —Kemetic (ancient Egyptian) Scribal Texts

A man's ruin lies in his tongue. —Kemetic (ancient Egyptian) Scribal Texts

Be patient with a bad neighbor; he may move or a disaster may take him out. —Kemetic (ancient Egyptian) Scribal Texts

Bed is the poor man's opera. —Kemetic (ancient Egyptian) Scribal Texts

False ambition serves the neck. —Kemetic (ancient Egyptian) Scribal Texts

If there were no fault, there would be no pardon. —Kemetic (ancient Egyptian) Scribal Texts

Learn politeness from the impolite. —Kemetic (ancient Egyptian) Scribal Texts

Making money selling manure is better than losing money selling musk. —Kemetic (ancient Egyptian) Scribal Texts

Malice drinketh its own poison. —Kemetic (ancient Egyptian) Scribal Texts

Pride and dignity would belong to women if only men would leave them alone. —Kemetic (ancient Egyptian) Scribal Texts

Pride feels no pain. —Kemetic (ancient Egyptian) Scribal Texts

Pride goes before a fall. —Kemetic (ancient Egyptian) Scribal Texts

Pride goeth before destruction and a haughty spirit before a fall. —Kemetic (ancient

Egyptian) Scribal Texts

Run a rope around your neck and many will be happy to drag you along. —Kemetic (ancient Egyptian) Scribal Texts

Put a stout ab (heart) to a steep hill. —Kemetic (ancient Egyptian) Scribal Texts

Put by for a rainy day. —Kemetic (ancient Egyptian) Scribal Texts

Run as hard as a wild beast if you will, but you won't get any reward greater than that destined for you. —Kemetic (ancient Egyptian) Scribal Texts

The barking of a dog does not disturb the man on a camel. —Medieval Egyptian Scribal Texts

The tyrant is only the slave turned inside out. —Kemetic (ancient Egyptian) Scribal Texts

When the angels present themselves, the devils abscond. —Kemetic (ancient Egyptian) Scribal Texts

The tail of the dog never gets straight even if you set a mold for it. —Kemetic (ancient Egyptian) Scribal Texts

A goose's child is an excellent diver. —Kemetic (ancient Egyptian) Scribal Texts

A monkey is a gazelle in its mother's eyes. —Kemetic (ancient Egyptian) Scribal Texts

An absent person has his excuse. —Kemetic (ancient Egyptian) Scribal Texts

Borrowing is bad, and returning money is a loss. —Kemetic (ancient Egyptian) Scribal Texts

Time never gets tired of running. —Amad (the great Egyptian poet)

Bathe her and then look at her. —Kemetic (ancient Egyptian) Scribal Texts

Protect the flame of your candle, it will light more. —Kemetic (ancient Egyptian) Scribal Texts

Dress up a stick and it will be a beautiful wife. —Kemetic (ancient Egyptian) Scribal Texts

He who couldn't overcome the donkey beat the saddle. —Kemetic (ancient Egyptian) Scribal Texts

He whose house is made out of glass shouldn't throw stones at others. —Kemetic (ancient Egyptian) Scribal Texts

If your friend is honey, don't lick it all. —Kemetic (ancient Egyptian) Scribal Texts

If you marry a monkey for his wealth, the money goes and the monkey remains. —Kemetic

(ancient Egyptian) Scribal Texts

Knowledge is in the head, not the copybook. —Kemetic (ancient Egyptian) Scribal Texts

News that's for money today will be for free tomorrow. —Kemetic (ancient Egyptian) Scribal Texts

Stretch your legs as far as your quilt goes. —Kemetic (ancient Egyptian) Scribal Texts

The cub is from the lion. —Kemetic (ancient Egyptian) Scribal Texts

Those who had some shame are dead. —Kemetic (ancient Egyptian) Scribal Texts

What comes easily is lost easily. —Kemetic (ancient Egyptian) Scribal Texts

When I hear you, I believe you. When I see what you do, I am surprised. —Kemetic (ancient Egyptian) Scribal Texts

When the angels arrive, the devils leave. —Kemetic (ancient Egyptian) Scribal Texts

The man who marries my mother, I call him uncle. —Kemetic (ancient Egyptian) Scribal Texts

People died and came back to life preparing for Yehia's Wedding. —Kemetic (ancient Egyptian) Scribal Texts

Give me a fish, I have the day's food. teach me how to fish and I will have everyday's food. —Kemetic (ancient Egyptian) Scribal Texts

The man a bald woman got will be easily seduced by a woman with beautiful hair. —Kemetic (ancient Egyptian) Scribal Texts

O! sister, you believe a man's honesty; it—s like you are believing in water in a sieve. —Kemetic (ancient Egyptian) Scribal Texts

He kills the victim and walks in his funeral. —Kemetic (ancient Egyptian) Scribal Texts

Lying has no legs. —Kemetic (ancient Egyptian) Scribal Texts

A person with a wound on his head keeps touching it. —Kemetic (ancient Egyptian) Scribal Texts

Lost is the person who forgets his/her past. —Kemetic (ancient Egyptian) Scribal Texts

Dress up a stick and you get a doll. —Kemetic (ancient Egyptian) Scribal Texts

They found no wrong with roses, so they said it is red. —Kemetic (ancient Egyptian) Scribal Texts

If you have to drag a dog to the hunt, neither he nor his hunting is any good. —Kemetic (ancient Egyptian) Scribal Texts

The skillful spinster spins with the leg of a donkey. —Kemetic (ancient Egyptian) Scribal Texts

When your son grows up, treat him as a brother. —Kemetic (ancient Egyptian) Scribal Texts

The earrings are given to those without ears. —Kemetic (ancient Egyptian) Scribal Texts

We tell them it is a bull, they say milk it. —Kemetic (ancient Egyptian) Scribal Texts

Dress up the beetle, it becomes the Lady of the Ladies. —Kemetic (ancient Egyptian) Scribal Texts

The trumpet player dies and his finger is still playing. —Kemetic (ancient Egyptian) Scribal Texts

The belly dancer (of Bes) dies and her hips are still moving. —Kemetic (ancient Egyptian) Scribal Texts

What is written on the forehead is to be seen by the eye. —Kemetic (ancient Egyptian) Scribal Texts

Oh, you getting in between the onion and its peel, you want to get anything other than its bad smell. —Kemetic (ancient Egyptian) Scribal Texts

What can a beautician do for a stern face? —Kemetic (ancient Egyptian) Scribal Texts

We let him in, he brought his donkey along. —Kemetic (ancient Egyptian) Scribal Texts

A cook tastes his own cooking, even if it is poison. —Kemetic (ancient Egyptian) Scribal Texts

He has his own brain, he can solve his own problems. —Kemetic (ancient Egyptian) Scribal Texts

Having wisdom makes a person look good. —Kemetic (ancient Egyptian) Scribal Texts

In trying to put make-up around the eye, he blinded it. —Kemetic (ancient Egyptian) Scribal Texts

The eye will never be higher than the eyebrow. —Kemetic (ancient Egyptian) Scribal Texts

The eye can see but the hand is too short. —Kemetic (ancient Egyptian) Scribal Texts

After fasting for so long, he feasts on an onion. —Kemetic (ancient Egyptian) Scribal Texts

The unlucky will stay unlucky, even if they hang a lantern on their head. —Kemetic (ancient Egyptian) Scribal Texts

Cut your bird's feather so that it doesn't leave you for someone else. —Kemetic (ancient Egyptian) Scribal Texts

A white plaster will be of benefit on a black day. —Kemetic (ancient Egyptian) Scribal Texts

Birds of a feather will end up landing together. —Kemetic (ancient Egyptian) Scribal Texts

A boat with two captains will sink. —Kemetic (ancient Egyptian) Scribal Texts

A bird in hand is better than ten on a tree. —Kemetic (ancient Egyptian) Scribal Texts

The swan's son is a good swimmer. —Kemetic (ancient Egyptian) Scribal Texts

Out of sight, out of mind. —Kemetic (ancient Egyptian) Scribal Texts

If the cat is away, the mice will play. —Kemetic (ancient Egyptian) Scribal Texts

The carpenter's door is loose. —Kemetic (ancient Egyptian) Scribal Texts

Those who burn their tongue when eating soup will blow in the yogurt. —Kemetic (ancient Egyptian) Scribal Texts

There is no smoke without the fire. —Kemetic (ancient Egyptian) Scribal Texts

Do a good deed and throw it into the sea. —Kemetic (ancient Egyptian) Scribal Texts

Patience is the key to release. —Kemetic (ancient Egyptian) Scribal Texts

If speech is silver, silence is golden. —Kemetic (ancient Egyptian) Scribal Texts

Relatives are spiders. —Kemetic (ancient Egyptian) Scribal Texts

Money goes to peacocks. —Kemetic (ancient Egyptian) Scribal Texts

Whatever you teach a stupid person, he will forget. —Kemetic (ancient Egyptian) Scribal Texts

The miserable get together with the hopeless. —Kemetic (ancient Egyptian) Scribal Texts

The kingdom of heaven is within you; and whosoever shall know himself shall find it. —Kemetic (ancient Egyptian) Pyramid Texts

The best and shortest road towards knowledge of Ma'at (truth) is Nature. —Proverb of the

Outer Temple of Luxor

For every joy there is a price to be paid. —Proverb of the Outer Temple of Luxor

If his ab (heart) rules him, his conscience will soon take the place of the rod. —Proverb of the Outer Temple of Luxor

What you are doing does not matter so much as what you are learning from doing it. —
Proverb of the Outer Temple of Luxor

The body is the temple of Neter (Goddess). That is why you must know yourself. —Proverb
of the Outer Temple of Luxor

Wine, women, and food give gladness to the heart. —Kemetic (ancient Egyptian) Scribal
Texts

Rastafari Bible verses

The courts often consider the existence of important writings in determining if a religion is legally valid.

legal standards

“5. b. Important Writings: Most religions embrace seminal, elemental, fundamental, or sacred writings. These writing often include creeds, tenets, precepts, parables, commandments, prayers, scriptures, catechisms, chants, rites, or mantras.” —*United States of America v David Meyers*

“a literature of its own,” —IRS definition of a church

Rastafari Bible verses

Genesis 1:11 “And God said, Let the earth bring forth grass, the herb yielding seed, and the fruit tree yielding fruit after his kind, whose seed is in itself, upon the earth; and it was so.”

Genesis 1:29 “And God said, Behold, I have given you every herb-bearing seed, which is upon the face of all the earth, and every tree, in which is the fruit of a tree yielding seed; to you ot shall be for meat.”

Genesis 3:18 “...thou shalt eat the herb of the field.”

Psalms 104:14 “He causeth the grass to grow for the cattle, and herb for the service of man.”

Proverbs 15:17 “Better is a dinner of herbs where love is, than a stalled ox and hatred therewith.”

Revelation 22:2 “the river of life proceeded to flow from the throne of God, and on either side of the bank there was the tree of life, and the leaf from that tree is for the healing of the nations.”

music

The courts often consider the existence of important writings in determining if a religion is legally valid.

It is my claim that music and art are just as valid as writing.

legal standards

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“a literature of its own,” —IRS definition of a church

religious freedom reply to IRS standards

The government places an emphasis on writing over all other artforms because of a government bias towards writing. The government is very uncomfortable with other artforms, particularly painting, sculpture, dance, music, and other activities that don't fit onto a government form.

cases

Gypsy street music in Madrid, Spain

The city of Madrid, Spain, has passed a law that directly violates the rights of Gypsy street musicians.

The government claims that the law has nothing to do with discrimination against Gypsies and instead is aimed solely at regulating “noise pollution”. It is typical of Christian governments to claim non-religious reasons for obvious religious discrimination.

Madrid Mayor Ana Botella claims that she has received noise complaints from residents of Madrid's dense medieval center. She claims that music ricochets around stone plazas packed with tourists and that music (instead of heavy traffic and construction noise) is the reason that Madrid's daily decibel levels are higher than those considered safe by the World Health Organization.

When the law was proposed in October 2013, David Erguido, a Madrid City Council member, stated, “We want to offer the best impression possible to tourists and allow local residents to get

their rest too.”

The new law requires street musicians applying for a permit to audition before three-member panel of Roman Catholic civil servants. Further, the law requires that appointments for auditions be made only through the internet, because very few of the Gypsies of Spain (the Gitanos) have access to the internet. And who knows more about art and music than petty government bureaucrats?

Nadal and Yllera of the Potato Omelette Band hid a camera in their amplifier to record their audition before a municipal secretary and two music instructors from Madrid's Conde Duque Cultural Center, where they sang “Oh, my poor Madrid, my city! They are kicking out musicians and artists, and replacing them with police. There is no jury better than the hat — the hat you put on the ground to collect donations.” The duo have become national heroes.

[Potato Omelette Band en el casting de músicos callejeros](#)

The Gitano Gypsies are famous for flamenco music, combining Indian, Greek, Roman, Persian, and Jewish music with their Gitano culture and music. The original purpose of flamenco music was to express protest against the Spanish Inquisition and the 1492 Expulsion. Flamenco combines cante (singing), toque (guitar playing), baile (dancing), and palmas (handclaps).

The word Gitano comes from Egiptano, the Spanish term for Egyptian, just as the English word Gypsy comes from Egyptian.

Spain has a long history of oppressive laws and policies, intended to drive the Gypsies out of Spain. Romani (Gypsy) settlements were forcibly broken up and residents dispersed. Romanies were required to marry non-Roma. Gitanos were forbidden from using their language and rituals, including flamenco music (so, Madrid's street musician law is not a new idea). Gitanos were prohibited from public office and from guild membership. In 1794 the Spanish government carried out a nationwide raid, arresting all the Gypsies they could find and imprisoning them in labor camps.

Throughout the medieval era, England, Switzerland, and Denmark attempted to put all Romani to death, while Germany, Italy, Portugal, and Spain attempted to expel all Romani. It was typical of Christian churches to kidnap Roma children, cut off the ears of Gitanos women, and brand the Romani with hot irons.

For more than 500 years it was common throughout Europe to kidnap and enslave the Roma.

According to the BBC, the Romani were among the first targets of Nazi atrocities, with at least 2 million Romani dying in concentration camps and other means of Nazi extermination. This makes the Gypsies the second largest group killed in the Holocaust, after the Jews. Adolf Hitler wrote that the Gypsies were the lowest of all humans.

Writer Ian Hancock called the Gypsy Holocaust the Porajmos, which means devouring or destruction in some dialects of the Romani language. This term is rarely used by the Roma

themselves.



Marzahn, the first internment camp for the Roma (Gypsies) in the Third Reich, Germany, date uncertain. —*Landesarchiv Berlin*

At least 500,000 Roma were gassed in Nazi concentration camps. Many more died from the horrendous conditions in the camps, including widespread typhus, smallpox, and dysentery. Millions more were exiled, beaten, starved, and killed. At Buchenwald, 250 Roma children were used as guinea-pigs to test Zyklon-B. At Auschwitz, SS Captain Dr. Josef Mengele conducted medical experiments on selected human subjects from the 23,000 Roma, Sinti, and Lalleri at the complex. At least 3,500 adult and adolescent Roma prisoners were subjected to medical experiments at Auschwitz, Ravensbrück, Natzweiler-Struthof, and Saschsenhausen.

The Society for Threatened Peoples estimates the casualties at 277,100. Martin Gilbert estimates a total of more than 220,000 of the 700,00 Romani in Europe, including 15,000 (mainly from the Soviet Union) in Mauthausen in January-May 1945. The United States Holocaust Memorial Museum cites scholars that estimate the number of Sinti and Roma killed to lie between 220,000 and 500,000. Dr. Sybil Milton, a historian at the U.S. Holocaust Memorial Research Institute, estimated the number of lives lost as “something between a half-million and a million-and-a-half”.

On November 14, 1935, the Law for the Protection of Blood and Honour, a supplementary extension to the Nuremberg Laws, was passed, and specifically stated that the Romani were to be defined exactly twice as strict as any other group (including the Jews). The Reich Citizenship Law of March 7, 1936, stripped citizenship from non-Aryans, blacks, Romanies, and Jews.

After World War II, the Federal Republic of Germany (West Germany) determined that all of the measures taken against the Roma before 1943 were legitimate official measures against persons committing criminal acts, not the result of policy driven by racial prejudice. In late 1979,

the West German Federal Parliament finally ruled that the Nazi persecution of the Roma was racially motivated and authorized compensation for suffering and loss under the Nazi regime. Of course, by that time, the vast majority of those eligible had already died. In 1982, West Germany finally acknowledged that the Roma were subjected to genocide.

Persecution of the Gypsies continued throughout the Soviet Union, and Czechoslovakia was still sterilizing Roma women well into the 1980s to limit the Romani population.

U.S. funded religious organizations are currently engaged in a massive campaign to convert Spanish Romanies to Evangelical Christianity.

Currently, 25% of all women in the Spanish prison system are Gitanos, even though Gitanos make up only 1.4% of the total Spanish population.

European neo-Nazi groups continue to target the Romani. According to the *Guardian*, Italy denies social service housing to Roma families on the grounds that the makeshift metal containers in isolated Roma camps are already permanent housing. At the same time, the Italian government has engaged in violent evictions of Roma camps since 2008, despite a ruling by Italy's highest court that these government crackdowns are unlawful. The *Baltimore Sun* reports that in 2013 the French have expelled at least 10,000 Roma after destroying their camps. In 2013, 70% of the Roma camps were razed. In one French city, local vigilantes set fire to a Roma settlement. French Interior Minister Jean-Marc Ayrault claimed that the 20,000 Roma in France have no intention of integrating and should all be expelled from France.



Roma women and their babies are escorted from their camp by French policemen

In October 2013 Leonarda Dibrani, a 15-year-old teenage Roma girl, was detained while on a school trip in France. She and her entire family were deported to Kosovo. Leonarda Dibrani said, "All my friends and my teacher were crying, some of them asked me if I had killed someone or stolen something as the police were looking for me. When the police reached the bus they told me to get out and that I had to go back to Kosovo." Her teacher confirmed through the Network for Education without Borders (RESF) that the other children were deeply distressed by the incident.



Leonarda Dibrani

Leonarda Dibrani told a Kosovan news agency (in French), “I’m frightened, I don’t speak Albanian. My life is in France. I don’t want to go to school here because I don’t speak any of the local languages.”

“This community crosses time and space with its traditions, and we in Europe have trouble to integrate them,” Alain Behr, a lawyer who has defended the Roma, told *The New York Times*. “Yet they have preserved their tradition, which is one of survival.”

European hatred of the Gypsies has become widespread, with complaints that Gypsies never work, are dirty and unhygienic, Gypsy camps ruin the countryside, Gypsy children never attend school, and that most of the Roma are drug dealers and pick-pockets.

Gypsies are actually very clean, taking hygiene very seriously, with compulsive hand-washing. Gypsies are hard workers, actually famous for their musicianship, craftsmanship, and metal-working.

European Christians claim that the Roma, like the Jews, were responsible for Jesus’s crucifixion. Jews, Gypsies, and Witches were falsely accused of the Blood Libel, the claim that they kidnapped Christian children in order to cook them (cannibalism).

persecution of witchcraft

The Cannabis Witch Hunt considers music to be Satanic and especially dislikes jazz, blues, rock, and other popular music art forms that have Black African roots.

“Negro entertainers with their jazz and swing music are declared an outgrowth of marihuana use which possesses white women to tap their feet.” — H.J. Anslinger, Federal Bureau of Narcotics, testimony before Congress, 1937

persecuted music genres:

blues music

rock music

jazz music

Kemetic or ancient Egyptian religion

The ancient Egyptians considered music to be of divine origin.

gathering places

The courts often consider the existence of gathering places in determining if a religion is legally valid.

legal standards

“5. c. Gathering Places: Many religions designate particular structures or places as sacred, holy, or significant. These sites often serve as gathering places for believers. They include physical structures, such as churches, mosques, temples, pyramids, synagogues, or shrines; and natural places, such as springs, rivers, forests, plains, or mountains.” —*United States of America v David Meyers*

“established places of worship,” —IRS definition of a church

religious freedom reply to IRS standards

The tenth standard, the “established places of worship” test, discriminates against new churches, since a newly formed church might not be able to establish a place of worship even if this is its top priority. Moreover, there are a number of religious organizations that do not believe in established places of worship. The Quakers, for example, have no sacred building in which religious services are held. Establishment of a “temple of stone” is not constitutionally required for a church to constitute a religion. Although most Plymouth Brethren have buildings for worship, many meet in private homes. Furthermore, for those religions that do not believe in deities, there is not “worship” and thus no “place of worship.” The terms of the test itself indicate its bias. — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Kemetic or ancient Egyptian religion

The Great Pyramids on the plains of Giza are the only surviving of the Seven Wonders of the World. They survived both Roman and Muslim attempts at destruction.

The Great Temple at Ephesus, another of the Seven Wonders of the World, was dedicated to Bast (called Artemis by the Greeks and Diana by the Romans). Women from all over Africa, Europe, and Asia (from as far away as China) came to the Great Temple at Ephesus and brought gifts from their homelands. The Christian writer Paul specifically congratulates Ephesian Christians on their vandalism (including destruction of art and burning of books) at the Great temple of Ephesus.

The Great Library at Alexandria was a temple of Pr Ntr Kmt, headed by a High Priestess of Aset (Isis) or High Priest of Ptah.

temples
pyramids
gardens

temples

The courts often consider the existence of temples in determining if a religion is legally valid.

legal standards

“5. c. Gathering Places: Many religions designate particular structures or places as sacred, holy, or significant. These sites often serve as gathering places for believers. They include physical structures, such as churches, mosques, temples, pyramids, synagogues, or shrines; and natural places, such as springs, rivers, forests, plains, or mountains.” —*United States of America v David Meyers*

“established places of worship,” —IRS definition of a church

body as a temple

The government thinks of temples as buildings.

A common religious idea is the body as a temple to the divine.

Rasta

Rastafari views the body as a temple. Therefore, Rastafari are expected to take good care of themselves. You see this in the Ital diet.

Many Rastafari believe that because their bodies are temples, they should let their hair grow long without any unnatural tainting.

Rasta also often refrain from tattooing their skin.

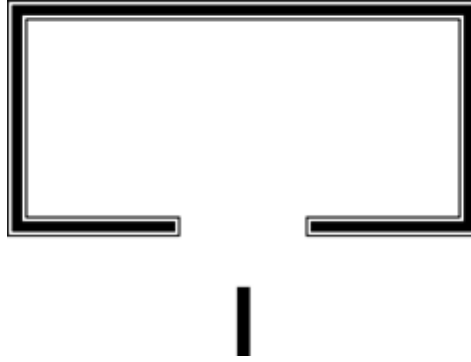
Kemetic or ancient Egyptian religion

pr - temple

The ancient Egyptians used the same word as “house” for their word for temple. This is because they believed that the temples were the actual physical houses of the deity worshipped there.

The ancient Egyptian word for “house” is “pr” (shown below). The hieroglyph “pr” is a line drawing of a house’s walls viewed from above. Because the hieroglyph “pr” is used both for the word “house” and for the syllabic sound “pr” are the same character, the ideogram (also called the pictorial sign, drawn as a short vertical line) is placed below the hieroglyph “pr” when the

meaning is house rather than just the sound. Context indicates whether the word means an ordinary house or a temple.



hieroglyph for temple

per - temple

The ancient Egyptian word house is also used for temples, which are considered to be the personal house of the corresponding deity.

The ancient Egyptians built many of their earliest temples with wooden columns topped with palm leaves. When the Egyptians switched to stone columns they continued to carve palm fronds and leaves into the tops of the columns (see example below).

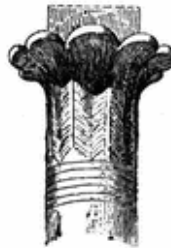


illustration of temple columns and ceiling



submerged temple at Philae



Baalbec ruin

Great Temple at Ephesus

The Great Temple at Ephesus, one of the Seven Wonders of the World, was dedicated to Bast (called Artemis by the Greeks and Diana by the Romans). Women from all over Africa, Europe, and Asia (from as far away as China) came to the Great Temple at Ephesus and brought gifts from their homelands. The Christian writer Paul specifically congratulates Ephesian Christians on their vandalism (including destruction of art and burning of books) at the Great Temple of Ephesus.

The statue of the Lunar Goddess at the Great Temple of Ephesus depicts the Goddess holding a large number of Easter eggs (although some claim they are bull testicals).

Great Library at Alexandria

The Great Library at Alexandria was a temple of Pr Ntr Kmt, headed by a High Priestess of Aset (Isis) or High Priest of Ptah.

converted temples

In the 300s and 400s the Christians in control of the Roman Empire forcibly converted hundreds of temples of Isis into Roman Catholic and Orthodox Christian churches.

pyramids

The courts often consider the existence of pyramids in determining if a religion is legally valid.

legal standards

“5. c. Gathering Places: Many religions designate particular structures or places as sacred, holy, or significant. These sites often serve as gathering places for believers. They include physical structures, such as churches, mosques, temples, pyramids, synagogues, or shrines; and natural places, such as springs, rivers, forests, plains, or mountains.” —*United States of America v David Meyers*

“established places of worship,” —IRS definition of a church

Kemetic or ancient Egyptian religion



Great Pyramids at Giza

photograph by Ricardo Liberato

19 June 2006

dust removal and white balance by kiwaner

The Great Pyramids on the plains of Giza are the only surviving of the Seven Wonders of the World. They survived both Roman and Muslim attempts at destruction.

Please note that the Pharaoh and his wife engaged in Ntr Sentra ritual at the location where each pyramid was built. The wife of Paraoh (as Goddess) inhaled cannabis smoke, then kissed Pharaoh. Pharaoh breathed in the divine smoke of the Goddess. This ritual was essessential for making the pyramids holy structures rather than ordinary buildings.

tomb at Qurna

The courts often consider the existence of temples in determining if a religion is legally valid.

legal standards

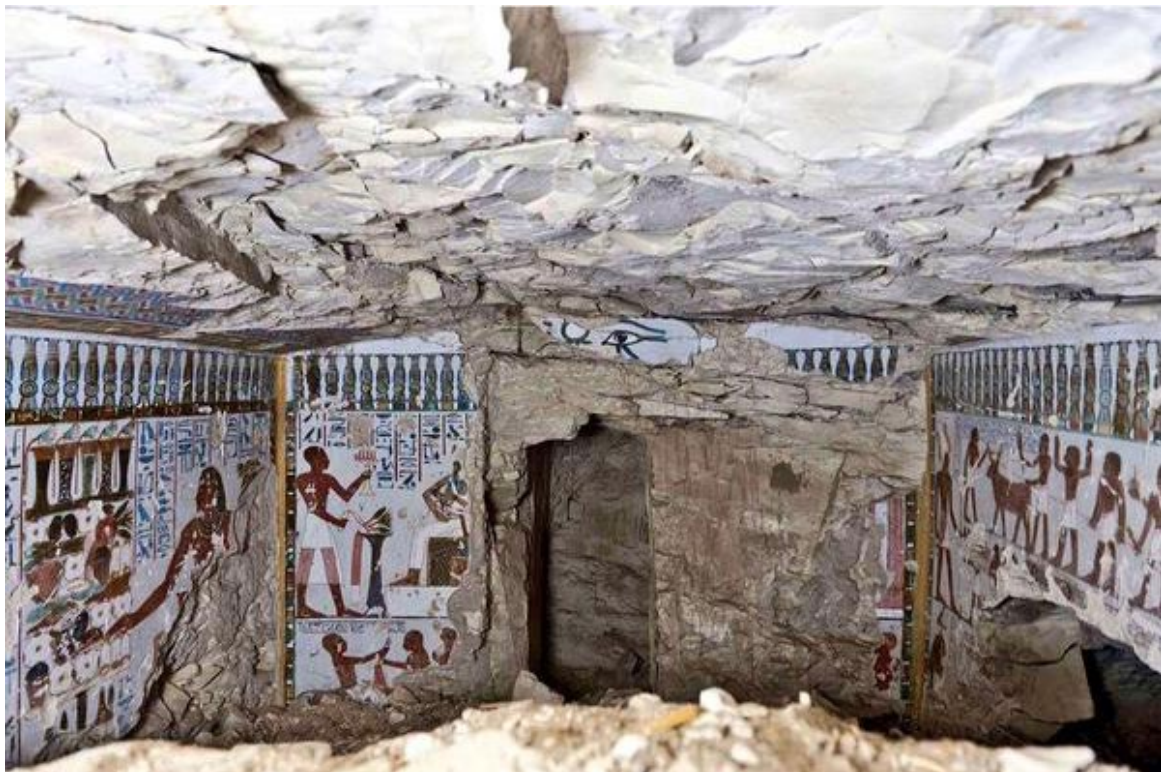
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Kemetic or ancient Egyptian religion

tomb at Qurna

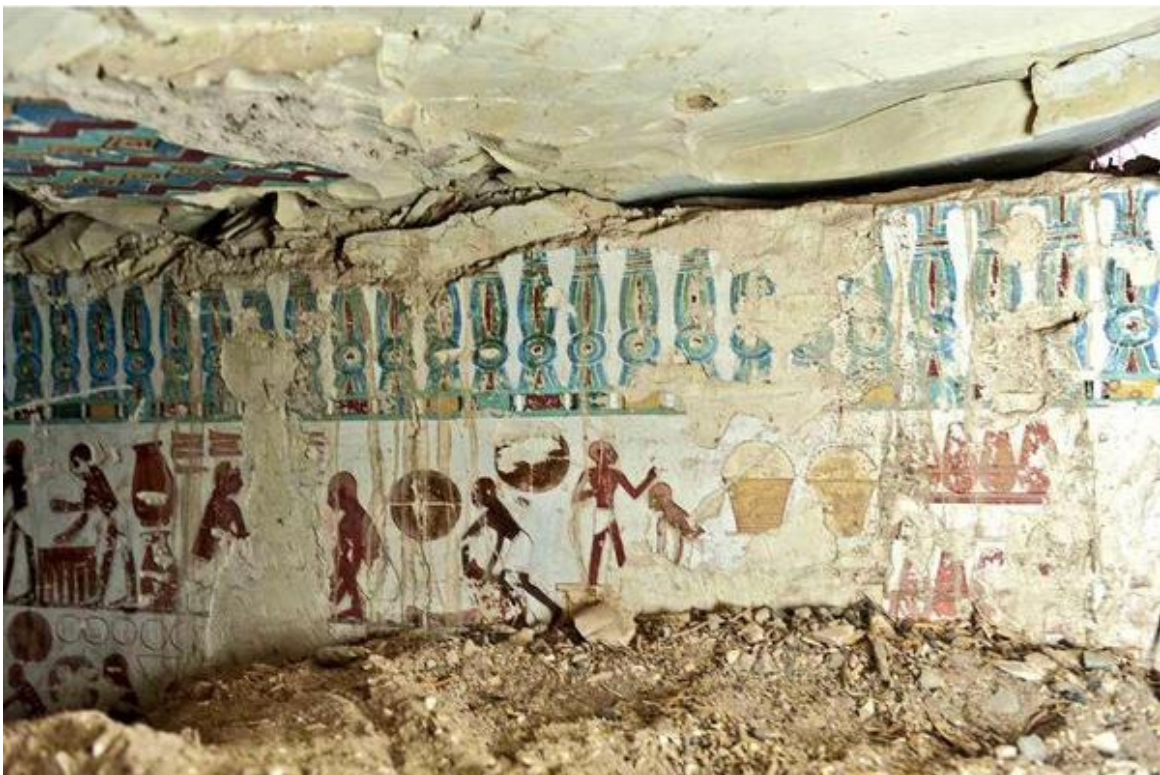
The 18th Dynasty tomb at Qurna was unearthed in early 2015.



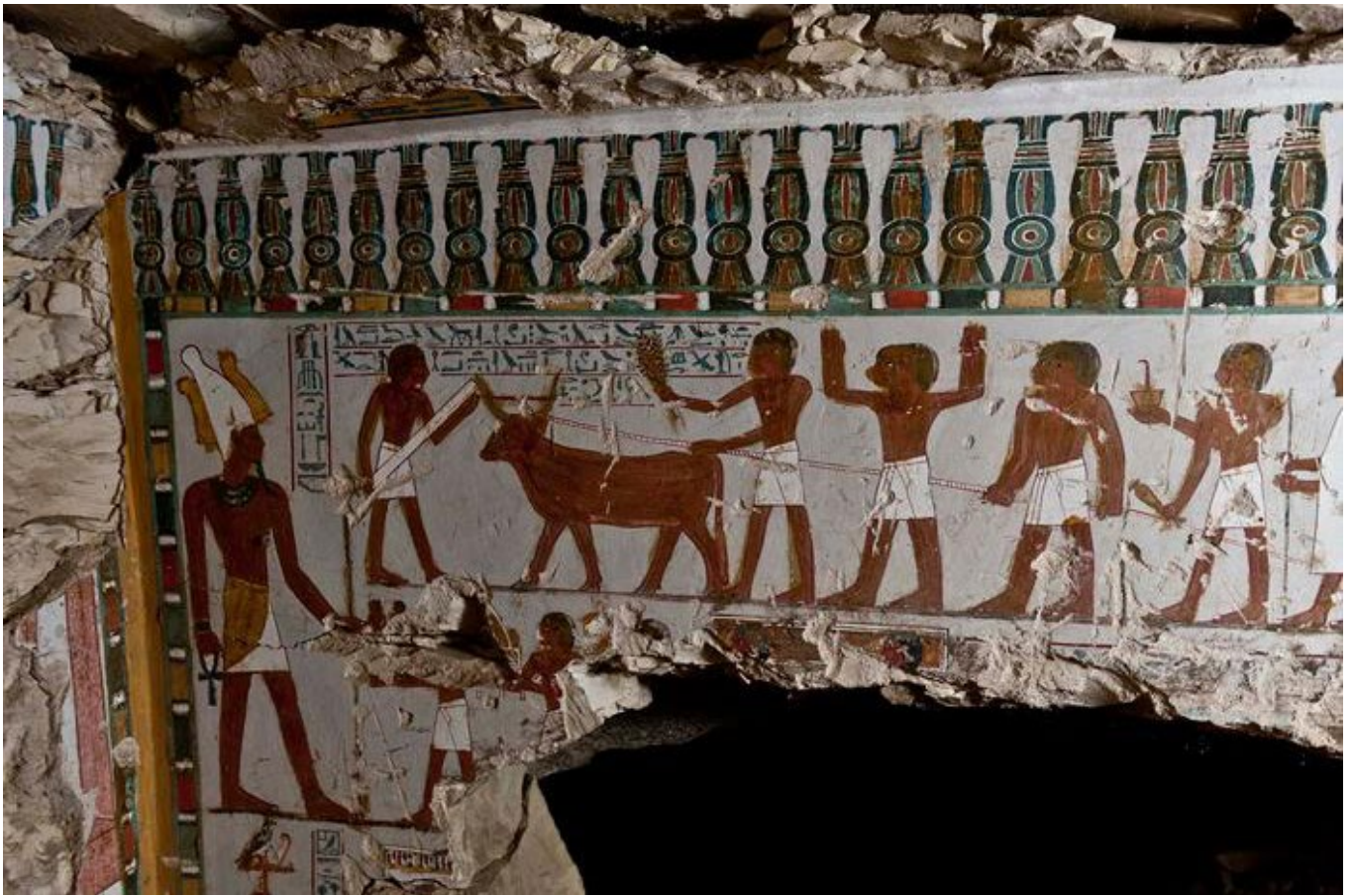
Luxor Times



Archaeology Magazine



Luxor Times



“3,400 year old tomb with amazingly vivid murals has been discovered in Luxor, Egypt.”

—*Archaeology Magazine*

Tomb of Userhet

The courts often consider the existence of temples in determining if a religion is legally valid.

legal standards

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“established places of worship,” —IRS definition of a church

Kemetic or ancient Egyptian religion

Tomb of Userhet

The tomb of Userhet is in the Valley of the Kings (KV 45) from approximately 1300 B.C.E. in the 19th Dynasty.



mural from the Tomb of Userhet



mural from the Tomb of Userhet

sacred gardens

The courts often consider the existence of gardens in determining if a religion is legally valid.

legal standards

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“established places of worship,” —IRS definition of a church

Kemetic or ancient Egyptian religion

temple gardens Goddess gardens

The following is religious advice. While it is possible that a court of law might consider a temple or Goddess garden grown in a religious manner as good faith practice of your religion, you must also consider the possibility that (depending on nation) you might be imprisoned, tortured, or executed for your religious beliefs and practices.

Your religious garden or Goddess Garden can be anything from a large elaborate garden on acres or square miles of land to a small plot in your back yard to even a few plants in your bedroom. Size is not a measure of holiness. The spirit you put into your garden is all that matters.

Gardens were an important part of the ancient Egyptian religion, particularly in the New Kingdom.

temple gardens

Most Kemetic (ancient Egyptian) temples had gardens that could be viewed by the public. There were also temple gardens that could only be entered by the priesthood. Some temples had both public and restricted access temple gardens.

The first large scale religious gardens recorded historically were created by Sesh Per Ankh around 2200 B.C.E. (about 600 years before the Hanging Gardens of Babylon). These first temple gardens were intended to grow medicinal flowers and herbs and to demonstrate the power

and glory of Pharaoh because flowers were grown by the temples in places where nature did not grow flowers. Sesh Per Ankh literally means “scribe of the House of Life” and included not just growers, but also doctors, musicians, artists, philosophers, scientists, librarians, and others. There is archaeological evidence of religious gardens predating modern humans.

The most famous of the ancient Egyptian temple gardens was on the grounds of the Great Temple at PerBastet (or Bubastis). According to Herodotus more than one quarter million worshippers gathered at the temple for festivals to the Goddess Bast (four times a year) and that the cannabis and cinnamon incense was so thick that visitors came under the influence more than a dozen miles away while still riding in boats to the temple grounds.

The largest single garden ever created, in the New Kingdom, under the rule of Ramses the Great, is estimated to have been double the size of the state of Rhode Island.

You can find similar religious gardens in most other world religions, the most famous example being the Hanging Gardens of Babylon, one of the seven wonders of the ancient world.

home gardens

Home gardens were widespread among ancient Egyptians who could afford them. One New Kingdom villa's garden was described by the owner: “You sit in their shades and eat their fruit. Wreaths are made for you of their twigs, and you are drunken with their wines.” Models of gardens were sometimes included in tombs.

Today you find many Wiccans have small scale Goddess Gardens at their homes.

Some persons, especially in urban areas, have an indoor garden rather than an outdoor garden. Ancient Egyptians who couldn't afford to have their own garden might have a few potted plants indoors. Some ancient Egyptian temples had both indoor and outdoor gardens.

The U.S. legal standard under the RLUIPA now states that “The term ‘religious use’ includes any exercise of religion, whether or not compelled by, or central to, a system of religious belief.” Regardless of the religion you belong to, you may want to clearly establish that your garden is required by your sincerely held religious beliefs. If you are going to risk arrest, imprisonment, torture, and possible death, you probably should believe very strongly.

There are many different reasons for growing cannabis for religious activity, such as the ancient Egyptian Ntr Sentra or the modern Rasta use of ganja. This may also include a sincerely held religious belief that you are required to grow religious cannabis because you have been called by Jesus, the Holy Spirit, Allah, G-d, Shiva, Gaia, Bast, Sekhmet, or other deities to care for the sick and disabled (or that you are required to grow for the sick and disabled because of karma, to obtain Moksha, or to attain Nirvana).

Religious gardens are distinguishable from commercial farms by the religious symbology employed. You may find your religious garden to feel more holy and sanctified to you if you go

to the extra effort to clearly mark your garden as a religious one through the use of ancient religious beliefs and symbols.

shape of gardens

The two most common shapes for a religious garden were the circle and the rectangle.

The circle shaped garden is the oldest known religious garden and dates back to Homo Erectus, the species of humanoids preceding our own.

The rectangular (or square) garden developed with the rise of civilization in Kemet (ancient Egypt) and elsewhere around the world. Rectangular gardens were usually laid out according to the four directions (east, south, west, and north), although some were aligned to the local flow of the Nile River or other important local landmarks. Sometimes gardens were aligned to important stars or to sunrise or sunset at solstice or equinox or even to the movement of the moon.

The tradition of irregularly shaped gardens grew out of the Shinto religion in Japan, and started out of the belief that the more natural shapes created a closer connection to nature and a more aesthetic garden.

In modern Wicca you will find many different shapes for Goddess gardens, each with distinct meanings relating to the specific Lord and Lady honored by the garden.

You may want to create pathways or arrange plants in traditional religious patterns, including circles, rectangles, triangles, five-pointed stars, arrows, spirals, mandalas, or labyrinths.

You will want to pick a shape for your garden that carries a clear religious meaning for you.

You may want to place a cleared circle in the center of an outdoor garden. These cleared circles are used for dance and music to celebrate the divine, as well as for specific religious ceremonies. You may want to videotape or film religious dance and/or ritual in a garden circle.

traditional Egyptian garden

The traditional ancient Egyptian religious garden was viewed as a microcosm, or a map of the greater world or universe as a whole. Water (or blue painted lines) went down the middle of the garden the long way and were symbolic of both the Nile River and the Milky Way (below as above).

Traditionally there were rows of stone or wooden columns, which represented the palm trees lining the Nile River. These columns started out as simple rounded wooden columns topped with real or carved palm leaves. Over time these columns became more artistic and it became the custom to paint and carve holy symbols and paintings on the entire visible surfaces of the columns. Indoor gardens also had religious symbols and paintings of important mythic scenes on the interior walls.

The Temple of Diana (or Artemis or Bast) at Ephesus, one of the seven wonders of the ancient world, was famous for its rows of beautiful marble columns. The Acropolis of Athens is a scaled down copy of the Temple of Diana at Ephesus. The Athenian Greeks used single row of columns and a less expensive column style, dramatically shrunk the size, and engaged in other cost saving methods, but the basic design is the same. In antiquity, humans saw an impact on the Moon and then saw some of the rock thrown off by the impact fall into the atmosphere and land at the site of the Temple of Diana at Ephesus. They believed that the rock was a physical part of the Moon Goddess. Christians destroyed this important site.

Ancient Egyptian religious gardens would often have an obelisk, a tall square sided pillar, usually carved with hieroglyphs, religious symbols, and religious artwork. The obelisk was normally placed outside of the garden, near the entrance. You can write on the obelisk in modern English or in ancient Egyptian hieroglyphs or Germanic runes or Celtic ogham or any other sacred writing system. The first thing that DEA agents will encounter will be your obelisk clearly indicating religious use.

statue

In the traditional ancient Egyptian religious gardens there would be a statue of the God or Goddess. This statue was typically not visible to outsiders and was often kept in a wooden or stone shrine to prevent unauthorized viewing. In Roman times the statues of the divine (especially statues of Bast and Isis) were proudly displayed on a raised platform in the center of the garden so that all could see.

Ancient Egyptian Goddesses particularly associated with the growing of cannabis include Seshat (Goddess of learning and wisdom), Bast (Goddess of cats, music, and arts), Sekhmet (Goddess of power and life), and Aset or Isis (Goddess of civilization). You can find small Bastet statues (Bast in the form of a long necked cat) at many garden supply stores. Sekhmet is a lion-headed Goddess. The Greek Goddess Artemis, the Roman Goddess Diana, and the Germanic Goddess Lucia were all believed to be the same Goddess as the ancient Egyptian Bast and statues of these other Goddesses are fairly easy to find.

Wiccans typically have two statues, one for the Lord and one for the Lady. These can be a God and a Goddess from any religion in the world (even mixing cultures) or can be statues that represent all of the masculine divine and all of the feminine divine, respectively.

Of course you can have statues from whatever religion you belong to.

garden entrance

The entrance to an ancient Egyptian garden was traditionally marked by two giant pylons (or square towers). The pylons separated the inner garden from the outer court. The outer court was often open to the public, especially on holy days, while the inner garden was reserved for the garden workers, the priesthood, and other selected individuals. You will probably want to restrict

access to your religious garden to appropriate individuals, and may want to create an inner and outer section, allowing guests into the outer court.

aquatic garden

Many ancient Egyptian temples were famous for the artificial lakes in their gardens. Some of these artificial lakes could be large enough that the other side couldn't be seen because of the curvature of the earth.

A small pond (with or without fish, frogs, and other life) can be placed at one end of a stream and a small waterfall at the other.

Ancient Egyptian aquatic gardens featured a benben stone, which represented the first land that rose from the primordial seas. The Egyptian pyramids are in the shape of the traditional ancient Egyptian ben-ben.

Small pyramids appeared in non-Egyptian gardens dedicated to the Egyptian Goddesses Bast or Isis throughout the Roman Empire as well as throughout medieval Europe, and parts of Africa and Asia.

Consider carefully whether your garden will feature water or not. Aquatic gardens dramatically increase the complexity, cost, and skill level needed for a temple garden.

If you have a body of water in your religious garden, in the springtime you can float small wooden or paper boats with colored candles in honor of Aset (Isis).

religious art

You may want to paint or carve symbols on columns inside your religious garden or on walls or fences surrounding your religious garden.

Some of the symbols common in ancient Egyptian religious gardens include the ankh (symbol of life), the earth as a disk, the zodiac as a disk, the was scepter (a forked staff with a dog head), the pyramid, the crescent moon, the sun disk, the spiral, the cord of hemp rope (especially a double pair of hemp rope with three twists and a loop at the top), the kheker (points skyward), the udjat (the Eye of Horus), the obelisk, sun symbols, the five pointed star, the crook and the flail, the loop of life, the tet (knot of Isis), the shen ring, the scarab, the Sphinx, the ka (two arms uplifted), the heart, the sistrum, the tet or djed (four backbones), the feather of Ma'at (the feather of truth, a white ostrich feather), symbols of various Gods and Goddesses, and symbols of plants.

Wiccans will want to include art that mark the four directions and the corresponding four elements at the boundaries of the garden and a pair of art (such as statues) in the midst of the garden that honor the masculine and feminine divine (the Wiccan Lord and Lady). Other common Wiccan symbols include the pentagram and pentacle. Wiccans who celebrate a particular ancient culture will want to include symbols and art from that culture.

If you belong to another religion, you will want to liberally make use of the symbols of your own religion (six-pointed Star of David for Jews, four-pointed cross for Christians, crescent moon and star for Muslims, the lotus or wheel of life for Buddhists, the yin-yang symbol for Taoists, the Om symbol for Hindus, etc.).

You may also want to place paintings, illustrations, and other artwork on walls or fences to clearly indicate the religious nature of your garden. The ancient Egyptians loved colorful paintings.

stones

In addition to statues, it was common to make simple (or complex) formations with stones. Some of the stones most commonly associated with cannabis and Bast include quartz, amethyst, agate, amber, lapis, jade, marble, jasper, obsidian, volcanic glass, moonstone, turquoise, and tigereye, as well as the metals silver, gold, copper, and bronze. Gardens dedicated to Bast would typically have a small cave made of beautiful stones at the east point of the garden (and sometimes a corresponding cave on the west point).

You may want to use finely crushed white gypsum for the pathways in your temple garden. This was a practice in ancient temple gardens of Aset (Isis) and any ancient Egyptian solar deity (Ra, Aten, Bast, Sekhmet, etc.) because white gypsum glows in the daylight sun. Even at night, white gypsum will reflect whatever moon light is available.

decorative items

Some other decorative items common in Goddess gardens include: wind chimes, bells, mirrors, candle holders, incense censers, pottery, baskets, hemp rope (including knots), cornucopia, three-part key, sundial, a large iron cauldron with three legs, hearth or fireplace, small boats, sceptors, and statues of animals.

If you use grow lamps (common for indoor gardens), you will probably want to mark the lamps with sun symbols. This can be as simple as a sun circle with lines representing rays of light or as complex as an entire scene of Isis, Bast, Sekhmet, Kherpi, Ra, and other ancient Egyptian deities on fancy sun boats. You may also consider sun images from other world religions.

plants

Outdoor gardens in ancient Egypt were typically lined with trees. The most common trees used were palm trees. Popular trees includes the sycamore (which is the shape of the ancient Egyptian hieroglyph for tree), acacia, fig, jujube, nut trees, pomegranate, tamarisk, and willows. Rare, but important, were cinnamon trees.

Some of the most common flowers in ancient Egyptian gardens included: bay laurel, cannabis, celosia, small yellow chrysanthemums, cornflowers, convolvulus, daisies, henna, irises,

ivy, jasmine, lychins, mandrakes, sweet marjoram, mignonettes, myrtle, narcissus, poppies, and roses.

Most temple gardens in ancient Egypt also included papyrus, lotus, and grapes. Papyrus represented Lower Egypt and lotus represented Upper Egypt.

Ancient Egypt was famous for its roses and roses were used in the rites of Aset (Isis).

Many temple gardens included plants that provided temple food for religious ceremonies. Some temples partially paid workers with onions.

Palm trees, as well as dates and cocounts, were sacred to Asar (Osiris) and Aset (Isis). The heart of palm (an edible food) was forbidden in offerings to Aset (Isis) or Asar (Osiris) because removing the heart of the palm kills the tree. Djehuti (Thoth) used the saw-toothed edge of the stem of fan palm strands to measure time and count days.

Citrus wood was often used for making ritual objects for the worship of Aset (Isis).

You may want to think about growing a few other plants along with cannabis, even if your primary concern is growing religious and/or medical marijuana. Surrounding your cannabis plants with mint, basil, sage, rosemary, thyme, tansy, and/or catnip will create a more traditional Goddess garden setting and may help protect your garden from insect infestations. Witches often surrounded their gardens with marjoram and hawthorne hedges to create a magick protective barrier. Plants traditionally associated with Bast include cannabis, cinnamon, catnip, hyacinth, hawthorne, lavender, lily of the valley, lotus, marjoram, morning glory, rose, and valerian. One traditional pattern for Bast is catnip in the west and marjoram in the east.

garden blessing

Traditional ancient Egyptian fertility and planting ceremonies involved naked dancing girls shaking sistrums (a combination of a three or four stringed harp and a tambourine-like rattle) to celebrate Bast, Hathor (Het Heret) or Isis (Aset). Fields were typically blessed with various liquids being poured onto the ground. One very common mixture was milk, honey, and olive oil, used in cultures throughout the Mediterranean. Chamomile tea, black tea, or green tea were common in Asia. Wine was often used to call on fertility from Bast. And of course smoking cannabis to honor the divine and bring the garden and the gardeners closer to the divine.

keepers of knowledge

The courts often consider the existence of keepers of knowledge in determining if a religion is legally valid.

legal standards

“5. d. Keepers of Knowledge: Most religions have clergy, ministers, priests, reverends, monks, shamans, teachers, or sages. By virtue of their enlightenment, experience, education, or training, these people are keepers and purveyors of religious knowledge.” —*United States of America v David Meyers*

“an organization of ordained ministers,” —IRS definition of a church

“ordained ministers selected after completing prescribed studies,” —IRS definition of a church

“school for the preparation of its ministers.” —IRS definition of a church

religious freedom reply to IRS standards

The seventh, or “organization of ordained ministers,” criterion has no relevance for churches that do not distinguish minister from congregant. Among Quakers “there is no division between clergy and laity, the vocation of every Friend is to be a lay minister.” The Plymouth Brethren believe in the Reformation doctrine of the priesthood of all believers; the distinction between clergy and laity, practiced by many churches, is considered unscriptural. Also, Jehovah’s Witnesses believe that all their members are ministers, that they are a “body of ministers.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

The question posed by the eighth criterion - whether or not ministers are ordained after completing a course of study - is irrelevant. Paul, for instance, was “called” on the road to Damascus. Jesus called disciples without seminary training who were, among other professions, fishermen and tax collectors (perhaps all hope is not lost for the IRS). The historic significance of revelation and the mystical call to religious office is ignored by this criterion. The churches of the Appalachian mountains see the presence of “the uneducated preacher” as one aspect of the “fullest expression . . . of the mountain spirit and the mountain religious tradition.”

[O]ne individual or another (usually male) among the people became convinced that God was calling him to preach and exhort. So he would set about establishing a church of his own, often on his property, either in his

house or a separate building he might construct. Like a patron to his neighbors in a lonely mountain hollow, he invited them to join with him in seeking the Word and will of God.

In addition, most Unitarian Universalist' "[p]rofessional ministers have the burden to legitimate themselves by achievement rather than by an ascribed status." In some black churches, especially Baptist and Pentecostal, the majority of the pastors receive no formal training. "[A] man with a good voice and attractive personality, a sense of humor, and sufficient desire can find a church to serve without formal training." Finally, Jehovah's Witnesses believe that true ordination comes directly from God. "Jehovah through Christ ordains his witnesses to serve as ministers - John 15:16." This concept is common in evangelical denominations. "Those who preach in Plymouth Brethren assemblies are generally well-versed in the Word of God, but usually they have no formal seminary training." — "Defining Religion in American Law" by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Finally, since, as outlined above, churches should not be required to have clergy, the existence of schools for the preparation of its ministers, as imposed by the fourteenth criterion, should similarly not be required. In a survey of 250 American denominations over ninety percent report no seminaries or schools of religion. by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Kemetic or ancient Egyptian religion

Hem (male) and **hemet** (female) were the primary Kemetic (ancient Egyptian) words for priest and priestess. The generic version was hem Ntr or hemet Ntr (priest or priestess of the Divine). The Ntr could be replaced with a specific deity name, such as Hem Ra or Hemet Bast.

The **web** priest (or priestess) was responsible for the purity of the ritual and the cleanliness of sacred rooms, tools, paraphernalia, and priesthood.

The **kher heb** was the priest or priestess who recited the liturgy and magick spells.

The **sesh per ankh** were the learned priesthood (including mathematicians, doctors, and scientists). Sesh Per Ankh is ancient Egyptian for "scribe of the House of Life". This can be translated into English as magician, shaman, witch doctor, witch, priest, doctor, or professor..

The English words **Witch** and **Witch Doctor** are translations for Sesh Per Ankh.

The English word "Witch" meant a woman in the Roman Catholic Church-imposed "Dark Ages". A male Witch was called a **He-Witch**. The word "warlock" is from the Polish for "oath breaker" and was used in Polish Witch Trials run by the Roman Catholic Church in which large numbers of innocent men and women were tortured and murdered by the Roman Catholic Church as part of official Roman Catholic Church dogma, on orders from numerous Roman

Catholic Church Popes. In modern times the word “Witch” refers to both men and women.

The word medicine comes from the prehistoric era of wise women who measure out plants in order to heal. More than two thirds of modern medications (total usage, not sheer numbers of drugs) are derived from Kemetic Witch (ancient Egyptian) herbal preparations!

The **sesh ked** were the artists of the priesthood (and, yes, the artists were an essential part of the priesthood).

sesh per ankh

sesh per ankh

The courts often consider the existence of important writings and keepers of knowledge in determining if a religion is legally valid.

legal standards

“5. b. Important Writings: Most religions embrace seminal, elemental, fundamental, or sacred writings. These writing often include creeds, tenets, precepts, parables, commandments, prayers, scriptures, catechisms, chants, rites, or mantras.” —*United States of America v David Meyers*

“5. d. Keepers of Knowledge: Most religions have clergy, ministers, priests, reverends, monks, shamans, teachers, or sages. By virtue of their enlightenment, experience, education, or training, these people are keepers and purveyors of religious knowledge.” —*United States of America v David Meyers*

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Kemetic or ancient Egyptian religion

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scribes

The following passages are from the Middle Kingdom compilation *Satire of the Trades*, also called *The Instruction of Dua-Kheti*, written by Tjaru (also called Duau Khety) for his son Pepy sometime between 1950-1900 B.C.E. in early Dynasty 12. This work extolled the virtues of being a scribe and put down other occupations, especially manual labor, with biting satire. The book was used throughout the New Kingdom to train scribes, who copied the pages to learn to write.

“I have seen many beatings ...

Set your heart on books!
I watched those recruited for labor —
There's nothing better than books!
It's like a boat on the water.
Read the end of the Kemit Book,
You'll find this saying there:
'A scribe at whatever post in town,
He will not suffer in it;
As he fills another's need,
he will not lack rewards'."

"They gave themselves the scroll as lector-priest,
The writing-board as loving son.
Instructions are their tombs,
The reed pen is their child,
The stone surface their wife.
People great and small
Are given them as children,
For the scribe, he is their leader."

ritual or ceremony

The courts often consider the existence of ceremonies and rituals in determining if a religion is legally valid.

legal standards

“5. e. Ceremonies and Rituals: Most religions include some form of ceremony, ritual, liturgy, sacrament, or protocol. These acts, statements, and movements are prescribed by the religion and are imbued with transcendent significance.” —*United States of America v David Meyers*

“a recognized creed and form of worship,” —IRS definition of a church

“regular religious services,” —IRS definition of a church

religious freedom reply to IRS standards

The twelfth criterion also excludes certain religious groups. For example, Quakers do not have a “religious service” in the strict sense of that term. Furthermore, services of some organized religions include only mystical contemplation and meditation, although these activities could be constructed as religious services. — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Rastafari

Rastafari often recite a short invocation when lighting a chalice (pipe). The following is one example:

“Glory be to the Father and to the Maker of Creation, as it were in the Beginning, is now an shall be forever, world with end, SELAH.”

marriage and weddings

circumambulation

marraige and weddings

The courts often consider the existence of marriages and weddings in determining if a religion is legally valid.

legal standards

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Kemetic or ancient Egyptian religion

ancient Egyptian marriages

Pr Ntr Kmt Has been performing marriages for more than 6,000 years (more historical and mythological details below).

Egyptian weddings

The first marriages in history were performed in ancient Egypt by the clergy (hemu) of Pr Ntr Kmt (the ancient Egyptian religion). Most of the moern wedding traditions are from ancient Egypt.

The wedding ring was originally made by weaving hemp into a circle. The wedding ring represented that the combination of the couple and the divine made a complete circle. Hemp was related to such important ancient Egyptian deities as Isis, Bast, Seshat, and Osiris. Because hemp wedding rings wore out and had to be replaced every few years the Romans switched to iron rings. Europeans switched from iron rings to gold rings. Around 3,000 B.C.E. the Egyptian phrase “without beginning, without end” came into common usage for describing the wedding ring.

Bridemaids and brides wore similiar dresses in order to confuse evil spirits. The original wedding bouquets were made of thyme and garlic to keep evil spirits away.

wedding vow

An ancient Egyptian wedding vow: “I Prince Yami, son of Pharaoh Akunadmun, take thee Nyla, to be my wife, and my queen, to share the good times and hard times side by side. I humbly give you my hand and my heart as I pledge my faith and love to you. Just as this ring I give you today is a circle without end, my love for you is eternal. Just as it is made of incorruptible substance, my commitment to you will never fail. With this ring, I thee wed.”

wedding readings

Two wedding readings from ancient Egypt:

“Whenever I Leave You”,
from the Harris Papyrus, 500 Song Cycle 2, 15th Century BCE, Egypt.

Whenever I leave you, I go out of breath
Death must be lonely like I am
I dream lying dreams of your love lost
And my heart stands still inside me
I stare at my favorite datecakes
They would be salt to me now
And pomegranate wine, once sweet to our lips
Bitter, bitter as birdgall

Touching noses with you, love, your kiss alone
And my stuttering heart speaks clear
Breathe me more of your breath, let me live!
Woman, meant for me!
The Goddess herself gave you as Her Holy gift
My love to outlast forever

“Let My Love Love Me Best”,
from the Turin Papyrus, in the Ramesside period circa 1100 BCE, Egypt.

Let my love love me best and I shall ordain
Her hands full of lotus blossoms and flowers
Full of buds and perfumes, strong ale
And beer of every brewable kind
Then she'll give me, her love, a day to remember
Make me drink down this day to its last shadow

history of marriage (started with lesbian marriage)

The first known marriages occurred in ancient Egypt. There had been human mating, similar to English common law marriage, long before there were official weddings.

The first marriages were public religious ceremonies commemorating the union of the Egyptian Goddesses Bast and Sekhmet in the creation myth of the [Cosmic Orgasm](#). The high priestess of Bast and the high priestess of Sekhmet took on the roles of their respective Goddesses for the public festivities.

This first marriage ceremony was widely popular.

Other temples in ancient Egypt quickly copied the idea, with grand public marriage ceremonies for their favored deities (most commonly male/female couples).

It wasn't long before the wedding ceremony spread from a religious celebration of divine unions to a religious celebration of human unions sanctified by the divine.

This was the origin of marriage and weddings.

And the first version was specifically lesbian.

While heterosexual marriage was the most common form in ancient Egypt, gay and lesbian marriages continued until outlawed by Christians.

circumambulation

The courts often consider the existence of rituals, such as circumambulation in determining if a religion is legally valid.

legal standards

“5. e. Ceremonies and Rituals: Most religions include some form of ceremony, ritual, liturgy, sacrament, or protocol. These acts, statements, and movements are prescribed by the religion and are imbued with transcendent significance.” —*United States of America v David Meyers*

Kemetic or ancient Egyptian religion

Circumambulation is the sacred practice of walking in circles. The oldest known versions occur in ancient Egypt, ancient Babylon, and ancient India. Modern versions include Vedic Circumabulation (the Parikrama of Hinduism), Jainist Circumambulation (called Pradakshina), Islamic Circumambulation (around selected sacred sites), Buddhist Circumabulation, and Masonic Circumambulation.

Circumambulation is usually done around sacred objects or locations and typically the sacred is kept on the right of those walking.

There is deep cosmic symbology, with the walking often representing the path of particular celestial bodies (such as the Earth, Sun, Saturn, or Mercury).

Circumambulation is often done with incense, and as mentioned elsewhere one of the sacred incenses is cannabis smoke.

Circumambulation can be very calming and help a person enter a balanced state.

If there is space within the building where you work as a medical cannabis minister (or space in an adjoining sacred garden), some of the persons you are ministering to may find circumambulation very enriching.

And regular circumambulation will help demonstrate to a court of law the sincerity and depth of the religious beliefs carried out in your personal medical cannabis ministry.

For a detailed Masonic view of circumambualtion see the article [We're All Dancing in a Ring Around the Sun](#) [external link].

tarot

The standard tarot deck has 78 cards.



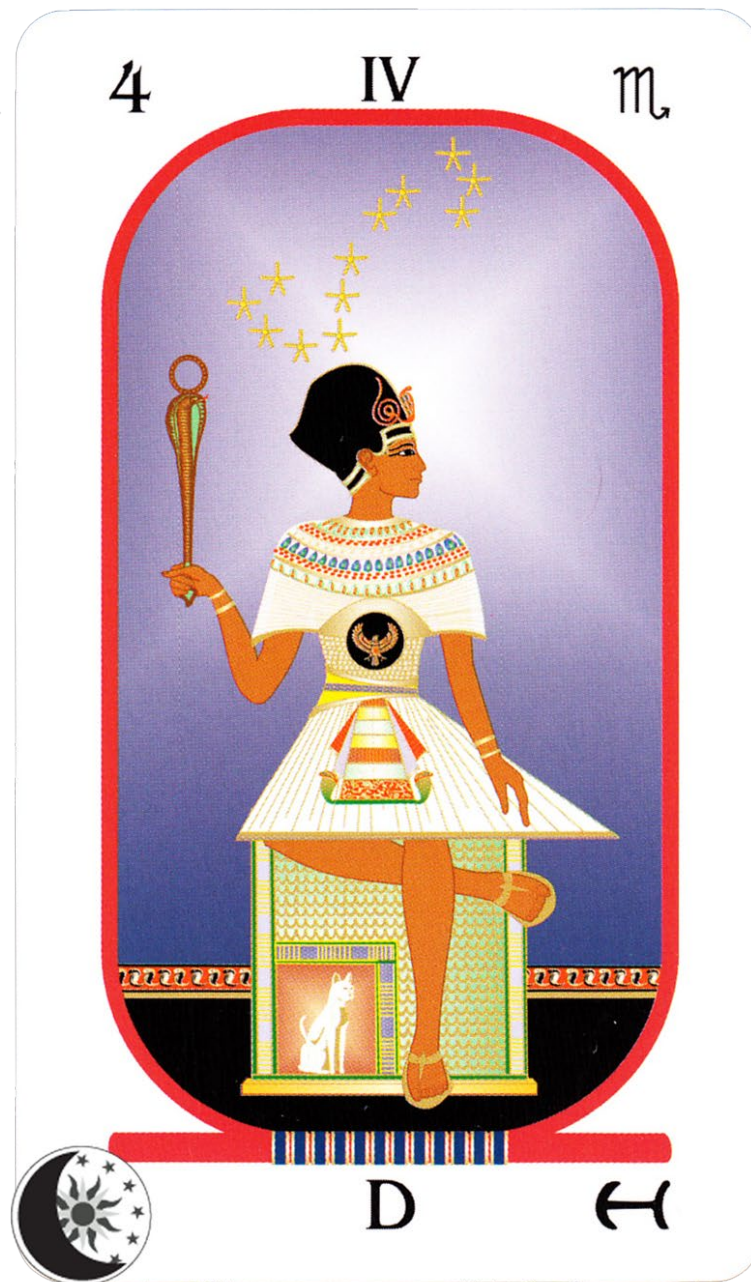
Real Wiccan Spells states “The tarot is a pack of 78 playing cards used by mystics for foretelling the future.”

Tarot was introduced in Italy as a card game similar to modern bridge.



Granny Moon states “Early Tarot (tarocchi) card games were mostly bridge-like games involving

trick-taking.”



Granny Moon states “In Tarot light symbolizes spiritual emanations, life and the activity of God, Gods, Goddesses.”

organized structure

The courts often consider the existence of organized structure in determining if a religion is legally valid.

legal standards

“(4) an organization within the cult designed to observe the tenets of belief.” —*Fellowship of Humanity v. County of Alameda*

“5. f. Structure or Organization: Many religions have a congregation or group of believers who are led, supervised, or counseled by a hierarchy of teachers, clergy, sages, priests, etc.” —*United States of America v David Meyers*

“a distinct legal existence,” —IRS definition of a church

“a definite and distinct ecclesiastical government,” —IRS definition of a church

“an organization of ordained ministers,” —IRS definition of a church

“regular congregations,” —IRS definition of a church

“regular religious services,” —IRS definition of a church

“Sunday schools for religious instruction of the young,” —IRS definition of a church

religious freedom reply to IRS standards

The third IRS criterion also poses a problem. A definite and distinct ecclesiastical government is not a sine qua non of a religious organization. It may be that “any written organizational guide” would be anathema to a particular church. Churches in the Protestant Congregationalist tradition would not consider any polity beyond the local church. For instance, there are tens of thousands of local Baptist churches in the United States, “each one independent of the others.” Each Unitarian Church enjoys full self-determination in all matters and “jealously guards its interests as an autonomous body.” Plymouth Brethren are governed locally and “even this form of government is often informal.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

discipline

The courts often consider the existence of organized structure in determining if a religion is legally valid.

legal standards

“a formal code of doctrine and discipline,” —IRS definition of a church

religious freedom reply to IRS standards

The fourth requirement, that a church have a formal code of doctrine and discipline, may contradict a fundamental tenet of an organization that it have “no traditional doctrine.” For example, the Quakers do not have a “written or spoken formal creed The Society never requires of its members the acceptance of any formula or belief.” The Plymouth Brethren “oppose man made creeds as being human additions to the Word of God. Many other evangelicals share this view.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

education

The courts often consider the existence of religious education in determining if a religion is legally valid.

legal standards

“ordained ministers selected after completing prescribed studies,” —IRS definition of a church

“Sunday schools for religious instruction of the young,” —IRS definition of a church

“school for the preparation of its ministers.” —IRS definition of a church

religious freedom reply to IRS standards

The thirteenth requirement, that there be Sunday schools for religious instruction of the young, is clearly a biased criterion base on a mainstream Christian concept. For example, many faiths worship on days other than Sunday. Moreover, there are a number of churches which do not believe in establishing separate schools for religious education of their young. Sunday school is not a necessity and is not present in many cultures in which religion is a pervasive element in followers' lives. Some churches and synagogues focus on a "singles" ministry or a "seniors" ministry. There are also some homosexual churches in which the presence of children may be less likely. — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Finally, since, as outlined above, churches should not be required to have clergy, the existence of schools for the preparation of its ministers, as imposed by the fourteenth criterion, should similarly not be required. In a survey of 250 American denominations over ninety percent report no seminaries or schools of religion. by Bruce J. Casino, [International Coalition for Religious Freedom](#)

Kemetic or ancient Egyptian religion

The Kemetic (ancient Egyptian) people had the world's first schools. Run by the priesthood at the Temples, these were the first free public schools in the world and the world's first free universal public education system (open to boys and girls, men and women).

The Great Library at Alexandria was a temple (pr) of Pr Ntr Kmt, headed by a High Priestess of Aset (Isis) or High Priest of Ptah.

holy days

The courts often consider the existence of holy days in determining if a religion is legally valid.

legal standards

“5. g. Holidays: As is etymologically evident, many religions celebrate, observe, or mark “holy,” sacred, or important days, weeks, or months.” —*United States of America v David Meyers*

“regular religious services,” —IRS definition of a church

religious freedom reply to IRS standards

The twelfth criterion also excludes certain religious groups. For example, Quakers do not have a “religious service” in the strict sense of that term. Furthermore, services of some organized religions include only mystical contemplation and meditation, although these activities could be constructed as religious services. — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

government establishment of religion

The U.S. Constitution’s first amendment (extended to the states through the 14th amendment) forbids government establishment of religion. Despite this clear constitutional requirement, Judges and other government officials are paid in money that specifically includes the religious oath “In God We Trust” and engage in numerous additional establishments of official government religion as intentional acts of felony treason.

Government courts are closed on Sundays because of a specifically historical adherence to the Christian sabbath. Government courts are closed on Saturdays because of a specifically historical recognition to the Jewish sabbath. Government courts are closed on Christmas and Easter specifically for the purposes of adhering to Christianity. In the Egyptian religion, Sunday is the best possible day for an innocent person to appear in court.

Courts stay open on Friday (originally called Freya’s Day), despite it being the Muslim day of rest and Celtic, Roman, Egyptian, and Germanic beliefs that court and legal activity should not happen on Friday.

The courts also stay open on the Muslim holy month of Ramadan, even though Muslims are forbidden from engaging in legal disputes during Ramadan. The courts also stay open on several

Jewish holy days, including Passover week, even though some Jews follow written rules that require specific religious restrictions on those holy days. The courts also stay open on the Ba'hai holy month.

The courts are open at times that astrology clearly forbids legal activity, including Moon Void of Course (V.C.), Mercury Retrograde, Mars Retrograde, Saturn Retrograde, and numerous aspects.

Kemetic or ancient Egyptian religion

How about Easter? Easter is the Germanic name of the Egyptian Goddess Bast. The Egyptians hired millions of German soldiers in the War Against the Sea People. Many of these German warriors returned home with worship of Bast and the springtime celebration of Bast/Easter at the first Full Moon after the Spring Equinox. The Christians usurped the central-most German holy day to make forced conversion to Christianity easier.

While the Christians changed the date of Easter (a new complicated formula to make it end up on a Sunday), they kept the original name and many of the features of the celebration of the Goddess of beginnings, fertility, and springtime. The eggs and rabbits are pagan fertility symbols. The Easter Basket appears prominently in one of the three common ancient hieroglyphs for the name of Bast. The statue of the Goddess at the Great Temple of Ephesus depicts the Goddess holding a large number of Easter eggs (although some claim they are bull testicals).

The Germans called the Easter Goddess “Oestra” or “Eostre”. Old English: “Eastre”. Northumbrian: “Eostre”. Old High German: “Ostara”. The month was called “Eostruronab” in Northumbrian, “Eatermonab” in West Saxon, and “Ostramanoth” in Old High German (with the Germanic rune Thorn replacing the “th” in the first two).

Oestara was introduced into the Germanic religions after more than one million German mercenaries returned to Germany after the War Against The Sea Peoples. The Germans fought against the Sea People in the Battle of the Delta and the Battle of Djahy. The Sea People had previously defeated, looted, and completely destroyed several major powers in the eastern mediterranean, including the Hatti, Kode, Carchemish, Arzawa, and Alashiya. After the battles, the German mercenaries returned home and brought some Egyptian customs, including their own version of Bast — Ostara. Note that Germany did not exist yet as a nation, but was an area with a whole bunch of tribes that shared the German language and Nordic religion.

The springtime festival (a fertility ritual for making the year's planting of crops be successful) was called Easter or Eostre. Bede wrote about Eostre during Eosturmonab (again, with the Germanic rune Thorn in place of the “th”, monab = month) in "The Reckoning of Time" in 725.

We get the modern English words “Easter” and “east” from the name of the Goddess and the springtime religious festival.

The modern German word for the Easter bunny is “Osterhase”, similar to the English “Easter Hare”. The older German version was the “Osterfuchs”, or the Easter Fox.

Rasta

Rasta holy days are called groundations. The number and choice of groundations varies.

The most common Rasta groundations are:

- January 7: Ethiopian Orthodox Christmas
- March 25: Birthday of Empress Menen
- April 21: Anniversary of Haile Selassie’s visit to Jamaica (Groundation Day)
- May 25: African Liberation Day
- June 16: Birthday of Leonard P. Howell
- July 23: Birthday of Emperor Haile Selassie
- September 11: Ethiopian New Year
- November 2: Coronation of Haile Selassie

In public gatherings, each Rastafari group has its own standard prayer. Here is one sample:

“Princes and princesses shall come forth out of Egypt, Ethiopia now stretch forth her hands before Jah. O Thou God of Ethiopia, Thou God of Thy Divine Majesty, Thy Spirit come into our hearts, to dwell in the paths of righteousness. Lead and help I and I to forgive, that I and I may be forgiven. Teach I and I Love and loyalty on earth as it is in Zion, Endow us with Thy wisemind, knowledge and Overstanding to do thy will, thy blessings to us, that the hungry might be fed, the sick nourished, the aged protected, the naked clothed and the infants cared for. Deliver I and I from the hands of our enemy, that I and I may prove fruitful in these Last Days, when our enemy have passed and decayed in the depths of the sea, in the depths of the earth, or in the belly of a beast. O give us a place in Thy Kingdom forever and ever, so we hail our majesty Haile Selassie I, Jehovah God, Rastafari, Almighty God, Rastafari, great and powerful God Jah, Rastafari. Who sitteth and reigneth in the heart of man and woman, hear us and bless us and sanctify us, and cause Thy loving Face to shine upon us thy children, that we may be saved, Selah.”

diet or fasting

Goddess diet

The courts often consider the existence of special diet or fasting in determining if a religion is legally valid.

legal standards

“5. h. Diet or Fasting: Religions often prescribe or prohibit the eating of certain foods and the drinking of certain liquids on particular days or during particular times.” —*United States of America v David Meyers*

check pictures

Rasta ital diet

The Rasta ital diet is compatible with the Kemetic (ancient Egyptian) Goddess Diet.

The word *ital* is derived from the English word *vital*.

ital diet has two key principles:

1. Refuse to eat any processed foods (because that would involve taking part in a system that is oppressive).
2. Don't eat any red meat (because of the belief that red meat rots inside the body).

The foods of an ital diet will vary from person to person, ranging from pure vegan through vegetarian to various semi-vegetarian diets.

Some refuse to eat fish, while others believe that the Bible supports the eating of fish.

Some also forbid any dairy products.

The essence of ital is to eat natural foods that are good for you.

Kemetic or ancient Egyptian religion

The Goddess diet plan is in the part of this book on food.

appearance

The courts often consider the existence of appearance in determining if a religion is legally valid.

legal standards

“5. i. Appearance and Clothing: Some religions prescribe the manner in which believers should maintain their physical appearance, and other religions prescribe the type of clothing that believers should wear.” —*United States of America v David Meyers*

clothing

The courts often consider the existence of clothing in determining if a religion is legally valid.

legal standards

“5. i. Appearance and Clothing: Some religions prescribe the manner in which believers should maintain their physical appearance, and other religions prescribe the type of clothing that believers should wear.” —*United States of America v David Meyers*

Kemetic or ancient Egyptian religion

white clothing

Throughout the Roman Empire there were large, well-attended processions dedicated to Isis. Participants wore all white clothing.

Most of the Egyptian priesthood, but especially the web priestesses, were required to wear all white clothing.

belly dancing

Belly dancing came to the Nile Valley from the Pygmies and was originally intended to honor the Pygmy deity Bes. Bes became one of the most important of Kemetic (ancient Egyptian) deities and belly dancing spread throughout the Middle East.

The main myth told in belly dancing was the myth of the Garden of Eden. The reason the garden was tropically rich and jungle-like was because the myth originally came from the Pygmy people living in the jungles of the Congo River valley.

Which is superior clothing: the flowing clothes of a beautiful belly dancer or the garish robes of dour Roman Catholic priests

propagation

The courts often consider the existence of propagation in determining if a religion is legally valid.

legal standards

“5. j. Propagation: Most religious groups, thinking that they have something worthwhile or essential to offer non-believers, attempt to propagate their views and persuade others of their correctness. This is sometimes called “mission work,” “witnessing,” “converting,” or proselytizing.” —*United States of America v David Meyers*

“Sunday schools for religious instruction of the young,” —IRS definition of a church

Kemetic or ancient Egyptian religion

Unlike the Christian and Islamic religions, the Kemetic (ancient Egyptian) religion does *not* evangelize or recruit. Never had to. People come to the religion to join out of their own personal interest.

distinct and separate existence

The courts often consider the existence of a distinct and separate existence in determining if a religion is legally valid.

legal standards

“a distinct legal existence,” —IRS definition of a church

“a definite and distinct ecclesiastical government,” —IRS definition of a church

“a distinct religious history,” —IRS definition of a church

“a membership not associated with any other church or denomination,” —IRS definition of a church

“a literature of its own,” —IRS definition of a church

religious freedom reply to IRS standards

As to the first criterion, a religious organization should not be required to have a distinct legal existence, since a “church” may decide not to incorporate for reasons of its own. In addition, a denomination may have no formal organization. For example, the Plymouth Brethren believe that “such denominational structures are unscriptural and divisive. Locally, some are incorporated, some are not.” This requirement “poses a special threat to ministers who serve the poor. Many such ministers lack the legal sophistication and resources to incorporate their churches even if such formal structure were consistent with their theology.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

The problem with the fifth criterion is that a new religion, by definition, cannot have “a distinct religious history.” “American civilization from the beginning and in each passing century has been continuously marked by extraordinary religious fertility and continues to exhibit this propensity to the present day.” The emergence of new religions is a common occurrence in American history. “The first Amendment serves to protect all religions, old and new, against government harassment, intrusion, injury and discrimination.” Baptists, Quakers, Mormons and Jehovah’s Witnesses each experienced persecution in America when their churches were new. Although no one would dispute that this history is unfortunate, a similar dynamic is at work in the present attitude of many in government toward new religions. Moreover, even established religious groups might not have a distinct history. “Due to the informal nature of the Plymouth Brethren, their religious history is indistinct.” — “Defining

Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

The sixth criterion, that a church must have a membership not associated with any other church or denomination, stems from confessional Christianity. It does not apply among Japanese, Chinese, or Asian Indians, for instance, who find it quite common to be members of and attend various religious services.

One of the best-known features of Chinese universalism is that the three religions - Confucianism, Buddhism and Taoism - are virtually treated as one. The religious allegiance of the average man is not related to one the three religions. He does not belong to a confession or creed. He participates unconcerned as to any apparent lack of consistency, alternatively in Buddhist, Taoist or Confucian rites. He is, by nature, a religious pragmatist.

One of the goals of the ecumenical movement is increased interaction and “association” between denominations and churches and their members. Religions such as the Bahai and Theosophy aim at unity of all religions.

Gandhi said that “[m]ore than all, people of all religions should learn to worship together on occasion.” The Plymouth Brethren do not practice formal church membership because “they believe church membership has no basis in Scripture, divides Christians from one another and can be a crutch which leads to a false sense of salvation.” The American tendency toward exclusive religious affiliation is by no means universal. A Japanese, for instance, may be married as a Shintoist and buried as Buddhist. “The Japanese never developed the idea, so prevalent in South and West Asia as well as the West, that a person had to adhere exclusively to one religion or another . . . Japanese were usually both Buddhists and Shintoists at the same time and often enough Confucianists as well.” — “Defining Religion in American Law” by Bruce J. Casino, [International Coalition for Religious Freedom](#)

general applicability

The U.S. allows for religious exemptions to laws of general applicability. Not all nations share this standard.

cases

From the book *Religion and Law: An Introduction* by Peter W. Edge, pages 85 and 86:

These cases contrast sharply with the decision of a closely-related Constitutional Court of South Africa in *Prince v The President of the Law Society of the Cape of Good Hope and Others* 2002(2) SA 794 (SA) (see also *Prince v President of the Cape Law Society and Others* 2001 (2) SA 388 (SA)). In this case, Prince wished to become an attorney. He satisfied the requirements for entry into the profession, but had a number of convictions for possession of cannabis. During the application process he expressed his intention to continue using cannabis, such use being inspired by his Rastafari religion. The Law Society concluded that he was not a fit and proper person to become an attorney, and refused to allow him to proceed in the qualification process. Prince did not seek to challenge the constitutionality of the prohibition on cannabis use generally, but instead argued that the prohibition went too far by including use required by the Rastafari religion. Evidence was heard from Professor Carole Dianna Yawney on the cultural and religious practices of Rastafari.

A large minority of the court agreed. Ngcobo J, with the support of Mokgoro and Sachs JJ and Madlang AJ (four justices in all) found that the status of Rastafarianism as a religion under the South African Constitution was not disputed; that the use of cannabis was an essential element of individual meditation and collective reasoning; that cannabis had particular medical effects, including harmful psychological dependence if smoked. Ngcobo J stressed that Rastafari made use of cannabis in different ways, including many which did not involve smoking. Officials opposing Prince's case argued that, while prohibition was a restriction on his right to freedom of religion, it was justifiable under s.36 of the Constitution as essential to the war on drugs, and to ensure South Africa met its international obligations. Additionally, a religious exemption for Rastafari alone would be difficult to administer. Ngcobo J stressed the importance of religious rights, particularly in a diverse democracy based on human dignity, equality, and freedom. In this case 'the existence of the law which effectively punishes the practice of the Rastafari religion degrades and devalues the followers of the Rastafari religion in our society. It is a palpable invasion of their dignity. It strikes at the very core of their human dignity. It says that their religion is not worthy of protection. The impact of the limitation is profound indeed' (para. 51). Accordingly, while recognizing the significance of the war on drugs, a properly crafted

religious exemption could allow the State to achieve its legitimate aims without restricting the religious rights of Rastafari to the extent the absolute prohibition did. Ngcobo J was not concerned with the content of such an exemption — that was a matter for the legislature — but was prepared to hold that the current law, lacking any exemption, was unconstitutionally broad.

A bare majority of the court reached the opposite conclusion. Chaskalson CJ gave a joint judgement [*British spelling*] with Ackerman and Kriegler JJ, which was concurred in by Goldstone and Yacoob JJ (for a total of five justices). Chaskalson interpreted the factual context of the case differently, placing more stress on the prevalence of cannabis use in Rastafari life, and its lack of regulation by doctrines or organisational structures. While in agreement with Ngcoo J that the prohibition limited the religious rights of Rastafari, the makers of this judgement considered it to be a justifiable limitation under section 36 of the Constitution. A blanket ban on drug use, regardless of the harm caused by a particular use, facilitated enforcement of legislation aimed at dealing with harmful drugs. In particular, in contrast with the structured use of peyote discussed by the minority judgement in the US case of *Smith*, there ‘is no objective way in which a law enforcement official could distinguish between the use of cannabis for religious purposes and the use of cannabis for recreation’ (para. 130). The practical problems of administering a religious exemption would be exacerbated by the organisational structure of Rastafarianism, and the need to encompass religious claims by non-Rastafarians. Accordingly, the legislation was a constitutionally valid limitation on Prince’s religious rights.

...The Constitutional Court in *Prince* undertook a serious, detailed, consideration of the case, and its religious context, before concluding that the restriction was justifiable.

strictscrutiny

There are three additional ways to defend against unjust laws that won't apply to all religions but may apply to my own religion.

The government tends to assume that a law is **neutral** regarding religion. It is my claim that the anti-drug laws in general were all created specifically for religious reasons and that they specifically target my religion on the basis of religious verses from the Jewish Torah and Christian Bible.

There is **strict scrutiny** to protect groups that have traditionally been discriminated against. This would include my own religion.

There is **no rational basis** which was recently used to strike down California's Proposition 8. This may apply to any religion.

legal standards

U.S. District Chief Judge Vaughn R. Walker struck down Proposition 8 using two standards of the law.

One standard Judge Walker used was that the law was based on so many unfounded claims that there was no rational basis for the law. This could be used against the federal law placing cannabis as a Schedule I drug. Francis Young, a DEA administrative law judge, ruled in 1988 that cannabis had no known danger (Docket # 86-22).

The other standard that Judge Walker used to strike down Proposition 8 was strict scrutiny.

Strict scrutiny is a test in discrimination cases holding laws to a higher standard when they adversely affect certain minority groups.

To meet strict scrutiny a law must be justified by a "compelling government interest" and must be "narrowly tailored" to meet that interest.

The tests for whether a minority is within a "suspect classification" are: (1) been historically targeted by discrimination; (2) a "discrete" and "insular" community; (3) be a minority for an unchangeable characteristic; and (4) lack the power to protect themselves using the political process. A qualifying group does not have to meet all four standards and other factors may be considered.

This obviously doesn't apply to Christian medical marijuana ministers, but it certainly applies to Pagan and Witch medical marijuana ministers (including my own religion).

Kemetic or ancient Egyptian religion

There is a large section that discusses how my religion (Kemetic Witchcraft) should deserve strict scrutiny.

legal defense

This page is a defense of my own personal religious beliefs and there may be no other human being in any universe of any time that agrees with me.

two opposites

I am defending my religion against two polar opposites: atheists and Abrahamic religions.

The ancient Egyptian (Kemetic) religion has lasted for a long time (exact length is subject to debate) and attempts to address questions common to most religions.

Of primary concern here are (1) the social and cultural aspects of the Kemetic religion, (2) the search for how to live, and (3) the nature of the aspect.

brief history

As a background, I am going to give a brief history of the ancient Egyptian (Kemetic) religion.

In the recent past there have been several brief periods of North Africa being a green verdant landscape, surrounded by longer periods of desert, on a 41,000 year cycle. This cycle may have been responsible for major waves of human migration out of Africa, including *Homo erectus* (ssp. *ergaster*), *Homo heidelbergensis*, and *Homo sapiens sapiens* out of Africa (at least twice).

The most recent verdant period was the African Humid Period between 11,000 and 5,000 years ago. North Africa had a large system of at least 127 major rivers, at least two major lakes, and inland deltas.

Throughout both the wet and dry periods, the Nile River continued to flow.

The ancient Egyptian religion is a subset of an older, more widely spread religion. Many of the artifacts of the older religion continued in the ancient Egyptian religion.

Prior to the most recent desertification the religion(s) of North Africa had the concept of totemic divine Goddess, some form of an afterlife, ritual worship of the divine, some form of attempts to understand nature, and some form of shamanic magic as an attempt to control nature.

During the time of the most recent desertification of the Sahara, shamans across North Africa used the local shamanic totem or religious symbol in an attempt to stop the spreading drought and bring back water.

All of these attempts failed other than the use of the Ankh in the Nile River valley. The ancient Egyptians viewed this as verification that their particular totem was real.

The ancient Egyptian religion continued through the pre-Pharaonic period as a tribal/shamanic religion and started to develop early versions of archetypal religion.

During the Pharaonic era the ancient Egyptian religion continued to develop new religious ideas (some borrowed from other surrounding religions and cultures), including elements of both modern Eastern and Western religion.

The ancient Egyptian religion also developed the earliest versions of both mathematics (certainly geometry and possibly trigonometry) and the earliest versions of science (the modern English word “chemistry” is derived from the name of the Kemetic deity Khem.).

change in religion

Members of Abrahamic religions tend to claim that any “true” religion is unchanging.

The fact is that all religions, including all Abrahamic religions, do in fact change over time. This is historical fact.

The Kemetic religion is comfortable with change. There is a sense of tradition, which has kept alive elements going back deep into prehistory, but there is also a willing acceptance of change and evolution.

The Kemetic religion has a long history of integrating new ideas, both borrowing from other religions and cultures and developing new ideas internally.

nature of the divine

The Kemetic concept of the nature of the divine has changed over time.

The Kemetic religion does have animistic, archetypal, and transcendental deities, but viewed these as subsets of a greater definition of the divine.

The Kemetic word translated as the divine is “ntr”.

The concept of ntr is pantheistic. In the Kemetic religion, all of nature is the ultimate divine.

Atheists will question why have a duplicate word for nature and why not just use the secular terminology.

This dichotomy is an artifact of English. The English word “God” comes from the ancient Germanic word “Gott” and was introduced into the English language when the British people were converted to Christianity. The English language lacked a distinct word that matched the

Christian conception of the divine.

The ancient Egyptian religion lacks a word for nature and lacks a word for the Kemetic religion.

Because the ancient Egyptians equated all of nature with the ultimate divine, there were not two separate words.

the nature of the divine

Like pretty much any people of any time, the ancient Egyptians struggled to understand how nature worked and how they could control (or at least survive) nature.

The earliest understandings were animistic and used shamanic/totemic approaches to dealing with nature.

The religion developed intricate systems of religious magic, including prayer and other ritual.

The religion also developed mathematics and science. Geometry was the first formal system of mathematics in the world. Additional advances in mathematics were developed by many societies, especially the ancient Egyptian, Sumerian/Babylonian, Indian, and later Phoenician, Chinese, and Greek.

Imhotep, who may have developed trigonometry, proposed that mathematics were the rules by which ntr (the divine) interacted with humans.

The ancient Egyptian priesthood realized that only mathematics can be proven. All of science uses scientific induction and is therefore always probabilistic rather than proven.

From a practical point of view, highly verified scientific knowledge can very very useful, but it is not proven.

Because science is never proven, it is always open to change.

While some members of the Kemetic religion were highly conservative and traditional, most members of the Kemetic religion were open to new information and willing to change their religious and worldviews based on new information. This approach will upset members of the Abrahamic religions.

The Kemetic two primary views for understanding ntr (the divine) are reason (especially mathematics and science) and non-reason (especially feelings, intuition, and magic).

the two methods

The ancient Egyptians viewed the two primary methods of viewing and understanding of ntr

(which is both the divine and all of nature) as Ma'at and Sekhem.

Ma'at is a complex idea, but for now let's just define Ma'at as order and reason.

Sekhem is also a complex idea, but for now let's just define Sekhem as intuition, feelings, and creativity.

The Kemetic religion viewed the balance between Ma'at and Sekhem as the central question for living a positive life.

The ancient Egyptians believed that too much Ma'at resulted in a stilted and regimented life.

The ancient Egyptians believed too much Sekhem resulted in a chaotic and undisciplined life.

Most modern religions believe that the major struggle in living a positive life is the struggle between good and evil, typically with good and evil represented or personified by a divine or semi-divine being (such as Jesus and Satan).

The idea of good and evil did enter into the Kemetic religion by the New Kingdom, but was not the focus of the religion.

science and mathematics as religious ideas

The Abrahamic religions have a dogmatic claim that science and mathematics are inherently not religious concepts.

This religious dogma was introduced into Christianity in the 500s because the Christian authorities realized they wanted to make use of the engineering, scientific, and mathematical ideas of not just the Kemetic religion but of a variety of pagan religions.

Even today you will find that the U.S. federal court system uses the Meyers' Test, created by a Roman Catholic federal judge, asserts that it is impossible for any science or mathematics to be part of any religion. Yes, the Christians have incorporated into the U.S. law Christian dogma and outlawed ancient religions and sent people to prison for violating that Christian dogma.

The Kemetic religion firmly includes science and mathematics as central religious beliefs. The two most famous members of the Kemetic priesthood were Imhotep, a priest of Ptah, and Hypatia, a priestess of Aset (Isis). Both Imhotep and Hypatia used science, mathematics, and reason as central tools in their religious practice. Imhotep probably created trigonometry. Hypatia probably created calculus.

afterlife

Most of the ideas about the afterlife in any religion come from the Kemetic religion. The Kemetic religion had both the heaven version of the afterlife and the reincarnation version of

repeated life, with the heaven version being far more common.

The common view was that the soul went to Tuat after death. If the soul travelled through Tuat, the soul could be judged. At judgement the soul is either allowed into heaven or permanently destroyed. There was no version of hell or eternal punishment. Judgement was based on how the soul lived his or her life, not on the basis of faith.

In the Kemetic religion, the ability to live the afterlife in heaven was typically dependent upon the continued existence of the body (hence, mummification) and the continued memory of the person's name (hence, the mortuaries).

The idea of a choice between heaven and hell was introduced by the Zoroastrianism (an ancient Persian religion).

Most of the ideas about heaven and afterlife in the Abrahmaic religions came from the Kemetic religion.

Over time, the Kemetic descriptions of the afterlife became more and more complex.

It is my personal opinion that there is no independent evidence of any afterlife of any kind. I personally hope there is a positive afterlife, but there is no proof. The increasingly intricate Kemetic descriptions of the afterlife seem to me to be a human invention out of fear of lack of continued existence (note that the ultimate punishment for those who were evil is the permanent end of existence).

There were many members of the Kemetic religion, including members of the priesthood, who believed that these descriptions of the afterlife were unsubstantiated and possibly false.

religious stories

The Kemetic religion had many religious stories, some of which appear in other religions, including Judaism, Christianity, Islam, Zoroastrianism, Hellenism, Hinduism, Celtic Druidism, Norse Asatru, and other world religions, often with the exact same names as the Kemetic original.

Certainly there were many members of the Kemetic religion who believed these stories as being literal history, but many members of the Kemetic religion viewed these stories as carrying religious meanings.

As just one example, while Judaism, Christianity, and Islam have only two creation myths (one from the Pygmies and one from the Mesopatamians), the Kemetic religion had more than 100 creation myths (including a version of the Pygmy creation myth closer to the Pygmy original). Most of the Kemetic creation myths include the Cosmic Lotus and the Cosmic Egg, but many of the creation myths are irreconcilably different. Members of the Kemetic religion had no problem with these different creation myths because they recognized these religious stories as

carriers of deeper religious truths.

ka or ki or soul

The ancient Egyptians developed a seven-fold version of the human. In comparison, many Western religions have a three-fold human, body, mind, and soul.

One view is the ka, which is usually translated as soul, is part of the seven-fold human. There is no proof that the ka physically exists.

There is another view that the ka is an emergent force. The Chinese idea of the ki is a similar idea and there are claims that the Chinese ki is derived from the Egyptian ka, although the evidence of that claim seems to be very flimsy.

sin

Sin is a separation between a human and the divine. This is a concept originally developed in the Sumerian religion to explain why bad things happened to good people during the widespread wars between city states.

The Kemetic religion has no concept of sin. As with any pantheistic religion, there is no way for anything, including humans, to become separated from all of nature and all of nature (including humans) is divine.

slavery

The Kemetic religion did *not* practice human slavery. The ancient Egyptians were one of the few cultures in antiquity to reject human slavery. Human slavery was banned by the Kemetic religion.

Zahi Hawass, former Minister of State for Antiquities Affairs, talking about the 1990 discovery of the graves of the pyramid builders said, “No way would they have been buried so honorably if they were slaves.”

Amihai Mazar, professor at the Institute of Archaeology at the Hebrew University of Jerusalem, points out, “No Jews built the pyramids because Jews didn’t exist at the period when the pyramids were built.”

Zahi Hawass adds, “Then who built the Pyramids? It was the Egyptians who built the Pyramids. The Great Pyramid is dated with all the evidence, I’m telling you now, to 4,600 years, the reign of Khufu. The Great Pyramid of Khufu is one of 104 Pyramids in Egypt with superstructure, and there are 54 Pyramids with substructure. There is support that the builders of the Pyramids were Egyptians. They are not the Jews as has been said. They were not people from

a lost civilization. They were not from outer space. They are Egyptian, and their skeletons are here and were examined by scholars and doctors. The race of all the people we found are completely supporting that they are Egyptians.”

Zahi Hawass stated, “Building a pyramid was a national project involving the entire country. Every household in Egypt sent workers, grain, and food to contribute to this project, which enabled the king to become a god in the afterlife.”

Dieter Wildung, a former director of Berlin’s Egyptian Museum, said, “The myth of the slaves building pyramids is only the stuff of tabloids and Hollywood. The world simply could not believe the pyramids were built without oppression and forced labor, but out of loyalty to the pharaohs.”

witch hunt

Most people think that the phrase “Cannabis Witch Hunt” is metaphor, not realizing that the laws against cannabis are religious laws against Witchcraft and that the methods and the laws against cannabis are all based on the church laws and procedures for carrying out a Witch Hunt.

This series of articles is *not* legal advice, but rather an objective history of the nature of the Cannabis Witch Hunt to help prepare those who use, possess, distribute, and grow cannabis for the depravity of the persecution they will face.

The Witch Hunt against cannabis is an actual literal Witch Hunt, even though many people think the term is mere metaphor.

Growing, processing, transporting, distributing, possessing, and using cannabis is an essential act of Witchcraft. The Christian Bible, Jewish Torah, and Islamic Koran all specifically and unambiguously outlaw Witchcraft with the death penalty. All U.S. federal judges are Christian or Jewish. A six person majority of the U.S. Supreme Court is Roman Catholic (John Roberts, Anthony M. Kennedy, Antonin Scalia, Clarence Thomas, Samuel Alito, and Sonia Sotomayor).

Very few Americans realize that the persecution of cannabis is Christian (especially Roman Catholic) persecution of Witchcraft. Very few American cannabis users have any idea that they are engaging in Witchcraft, much less that they are being targetted for Witchcraft.

This series of articles explains how the cannabis Witch Hunt actually works and your possible defenses under federal law.

You will be shocked at how unfairly the system is stacked against innocent Witches. Many of the rights you were taught in school simply don't exist in the courtrooms. The Witch must establish innocence beyond the unreasonable doubts of Christian judges and must do so following highly biased rules and procedures intended to make it nearly impossible to obtain a fair Witch Trial.

This series of articles explains a kind of Witchcraft known as Am Khent Kemeticism, but includes additional materials that may be useful for those who practice some other form of Witchcraft or cannabis religion.

Under the federal Religious Freedom Restoration Act (RFRA) an innocent Witch must prove in court that the law is unambiguously an establishment of religion, that the law is unambiguously directed at limiting free exercise of religion, that the law serves no possible legitimate government purpose, that cannabis has absolutely no danger, that the Am Khent Witchcraft religion is a religion, that the practitioner is sincere in his or her beliefs, that Am Khent Kemeticism requires the use, possession, transportation, distribution, growing, and preparation of cannabis, and that there are less restrictive ways that the government can take action against

cannabis.

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Goddess of cannabis
Diana

What possible reason could the U.S. government have for such Draconian penalties for cannabis? It is because Chrsitianity has always imposed Draconian penalties for Witchcraft, including [torture](#) and the [death penalty](#). The [Controlled Substances Act](#) imposes harsher penatlies for cannabis than for rape, murder, and torture because the Christian judges and Congresspersons consider Cannabis Witchcraft to be a more serious religious offense than violent crimes.

blood libel

The Blood Libel is the false claim made by the Inquisitions, Witch Hunts, and Witch Trials that supposedly Witches (the Inquisitions, Witch Hunts, and Witch Trials) and Jews (the Inquisitions) who supposedly were extremely ugly with large noses supposedly kidnapped Christian babies and children (supposedly Witches lured them with offers of herbal candies), supposedly raped Christian babies and children (including oral and anal sodomy), supposedly tortured Christian babies and children, supposedly murdered Christian babies and children by baking or cooking them, and then supposedly committed cannibalism by eating the cooked bodies of Christian babies and children.

The Blood Libel was used as the official legal justification for beating, gang raping, torturing, sexually mutilating, strangling, drawing and quartering, beheading, baking, and burning Witches and Jews at the stake.

The Blood Libel is the most conscious shocking false charge humanly possible.



There are official government and/or Church paperwork confirming at least 30,000 persons in Germany being put to death by 150 years of German Inquisition and historical documents confirming at least 60,000 persons in Europe (mostly Poland and Germany) for the same period. Cecil Williamson put up a memorial in 1952 dedicated to “the estimated nine million people killed during the witch persecutions in Europe”. None of these estimates include the 1-1/2 million Roma murdered in the Nazi Holocaust for Gypsy Witchcraft (six million killed: 3 million Jews, 1.5 million Gypsies, 0.8 million homosexuals, and 0.7 million others).

In 1999 a group of Christian pastors attempted to force the U.S. Army to forbid Wiccans from practicing their religion on the Army base at Fort Hood, Texas. Rev. Jack Harvey, pastor of Tabernacle Independent Baptist Church in Killeen, Texas, allegedly arranged for at least one member of his church to carry a handgun during religious services, “in case a warlock tries to grab one of our kids...I’ve heard they drink blood, eat babies. They have fires, they probably cook them...”

In 2009 the previous Roman Catholic Pope called on Catholics to take action against African Witches (see timeline).

To this day thousands of accused Witches are murdered world-wide. Many of the accused are not actually Witches.

cartoons

The *Sunday Times* ran an editorial cartoon on Holocaust Memorial Day (January 27, 2013) depicting Israeli Prime Minister Benjamin Netanyahu looming over a wall built with Palestinians caught between blood-splattered bricks. The cartoon was created by Gerald Scarfe.

Martin Ivens, acting editor, said that the last thing he or “anyone connected with the Sunday Times would countenance would be insulting the memory of the Shoah or invoking the blood libel.”





movies

A new movie has been released entitled *Hansel & Gretel: Witch Hunters* that uses the blood libel as the entire basis of the movie and encourages people to kill Witches world-wide.

timeline

A time line on the persecution and history of cannabis Witchcraft.

approx 3100 B.C.E. Probable date of the writing of the original of the famous Eber's Papyrus, which discusses Cannabis Witchcraft.

approx 2000 B.C.E. Earliest surviving written documentation of cannabis use in Witchcraft. Discusses using cannabis for treating sore eyes and cataracts.

approx 1700 B.C.E. Cannabis Witchcraft mentioned in the Ramesseum III Papyrus medical text.

approx 1600 B.C.E. Cannabis Witchcraft mentioned in the Eber's Papyrus medical text. The Eber's Papyrus is the oldest known complete medical textbook in existence. Most scholars believe that it is copy of a much earlier text, probably from around 3100 B.C.E.

1574 B.C.E. Pharaoh Seqenenre-Taa II's mummy buried with cannabis pollen.

1546 B.C.E. Pharaoh Amosis's mummy buried with cannabis pollen.

1524 B.C.E. Pharaoh Amenhotep I's mummy buried with cannabis pollen.

1518 B.C.E. Pharaoh Tuthmosis I's mummy buried with cannabis pollen.

1504 B.C.E. Pharaoh Tuthmosis II's mummy buried with cannabis pollen.

1491 B.C.E. Hebrew priests write [Exodus 22:18](#) in their Torah, requiring the death penalty for all Witches. **Jewish death penalty for Witchcraft.**

1450 B.C.E. Pharaoh Tuthmosis III's mummy buried with cannabis pollen. Pharaoh Tuthmosis III calls Seshat "Sefkhet-Abwy" or "She of the seven points". Spell 10 of the Coffin text states "Seshat opens the door of heaven for you".

1419 B.C.E. Pharaoh Amenhotep II's mummy buried with cannabis pollen.

1386 B.C.E. Pharaoh Tuthmosis IV's mummy buried with cannabis pollen.

1349 B.C.E. Pharaoh Amenhotep III's mummy buried with cannabis pollen.

1334 B.C.E. Amenophis IV buried with three ply hemp cord in the hole of a stone and a large mat bound with hemp cords.

1325 B.C.E. Pharaoh Tutankhamen's mummy buried with cannabis pollen. This is the famous King Tut.

approx 1300 B.C.E. Cannabis Witchcraft mentioned in the Berlin Papyrus medical text.

approx 1300 B.C.E. Cannabis Witchcraft mentioned in the Chester Beatty VI Papyrus medical text.

1294 B.C.E. Pharaoh Ramesses I's mummy buried with cannabis pollen.

1279 B.C.E. Pharaoh Seti I's mummy buried with cannabis pollen.

1213 B.C.E. Pharaoh Ramesses II's mummy buried with cannabis pollen. This is Ramses the Great.

1202 B.C.E. Pharaoh Merenptah's mummy buried with cannabis pollen.

1193 B.C.E. Pharaoh Seti II's mummy buried with cannabis pollen.

1151 B.C.E. Pharaoh Ramesses III's mummy buried with cannabis pollen.

1145 B.C.E. Pharaoh Ramsesses IV's mummy buried with cannabis pollen.

1141 B.C.E. Pharaoh Ramesses V's mummy buried with cannabis pollen.

1133 B.C.E. Pharaoh Ramesses VI's mummy buried with cannabis pollen.

1108 B.C.E. Pharaoh Ramesses IX's mummy buried with cannabis pollen.

1032 B.C.E. Pharaoh Pinudjem I's mummy buried with cannabis pollen.

approx 50 B.C.E. Diodorus Siculus (Sicilian Greek historian) reports that Egyptian women use cannabis witchcraft to relieve sorrow and bring good cheer.

270-275 Roman emperor Aurelian imposed a tax on Egyptian cannabis.

383 Priscillian of Avila executed for witchcraft. Burned to death.

550 Byzantine emperor Justinian sends an army to Philae to murder the worshippers at the Great Temple of Isis. Christian soldiers destroy statues and deface reliefs with Christian crosses. Bishop Theodorus leaves an inscription taking credit for this "good work". Centuries later Muslims deface Christian artwork at the site.

906 *Canon Episcopi*, a collection of church laws, declared that belief in Witchcraft is heresy.

1233 Pope Gregory IX authorizes the Roman Catholic Inquisition.

1320 Pope John XXII officially declares Witchcraft and the Old religion of the Pagans as a "heretical movement" and a "hostile threat" to Christianity.

1324 Petronilla de Meath flogged, excommunicated, and burned at the stake for Witchcraft at Kilkenny, Ireland, the first Witch murdered in Ireland.

1484 Pope Innocent VIII issued an edict entitled [*Summis desiderantes affectibus*](#) alleging that many men and women were in collusion with the Devil. All Christians were required to assist the two Dominican monks, Jacob Sprenger and Heinrich Kramer, placed in charge of handling this supposed Witchcraft problem.

1486 Dominican monks Jacob Sprenger and Heinrich Kramer publish [*Malleus Maleficarum*](#) or “the Witch’s Hammer”, codifying the charges, interrogation procedures, and judicial resolutions for Witchcraft trials.

25 August 1538 [Martin Luther](#) calls for the murder of all Witches.

1541 Witchcraft made illegal in England.

1563-1603 At least 17,000 Witches killed in Scotland.

1573-1700 At least 70,000 Witches killed in England.

1600-1680 At least 40,000 Witches killed in Great Britain.

1604 England passes law decreeing capital punishment for Witches and Pagans.

1610-1840 At least 22,000 Witches killed in Bamberg, Germany.

1644 New England colonies made death the penalty for suspicion of Witchcraft.

1970 U.S. Congress passes the [Controlled Substances Act \(CSA\)](#) as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, outlawing cannabis witchcraft and establishing Christianity as the official U.S. religion.

1986-1996 At least 300 Witches killed in South Africa.

1998 At least 100 Witches killed in Indonesia.

the Pope in Angola

2009 On March 21, 2009, Pope Benedict XVI gave a speech at the São Paulo Church in Luanda, the capital city of Angola, Africa, condemning Witchcraft, the fastest growing religion in Africa, and called on Christians to stop tolerating Witches. The Pope, who was an active member of the Hitler Youth as a young man in nazi Germany, said that Africans “are living in fear of spirits, of malign and threatening powers. In



their bewilderment, they even get to the point of condemning street children and even the elderly as alleged sorcerers, they say that they are witches.” He called on Christians “to proclaim that Christ has triumphed over death and all those occult powers.”

The Pope continued “Someone may object: ‘Why not leave them in peace? They have their truth, and we have ours,’ If we are convinced that, without Christ, life lacks something, that something real — indeed, the most real thing of all — is missing, we must also be convinced that we do no injustice to anyone if we present Christ to them. Indeed, we must do this. It is our duty to offer everyone this possibility of attaining eternal life. Who can go to them to proclaim that Christ has triumphed over death and all those occult powers?”

The 2009 U.S. State Department report on human rights in Angola states children accused of Witchcraft suffer abuses such as “the denial of food and water, or ritualistic cuttings and the placing of various caustic oils or peppers on their eyes or ears.”

Thousands of children accused of Witchcraft in Angola, Congo, and the Congo Republic are cast out of their homes and often blinded or murdered.

Children in Angola who suffer from malaria and AIDS are often murdered as Witches. In 2006, a three-year-old HIV-positive child in Angola was suspected of cursing his parents and was abandoned in a chicken coop where the chickens pecked out one of his eyes.

In 2007, an elderly woman in Nigeria was beheaded after being accused of placing a curse on a member of another tribe. Her murder led to a series of inter-ethnic killings that left 80 dead.

In 2007, an 81-year-old man was beaten to death by a gang of villagers after being accused of using Witchcraft to kill three of his grandsons.

In February 2007, the Catholic University of East Africa in Nairobi, Kenya, held a three-day symposium on Witchcraft. The Catholics accused Witchcraft of “destroying” the Catholic Church in Africa.

Michael Katola, a lecturer in pastoral theology, stated “It is important for the Church to understand the fears of the people, and not to attribute them to superstition. Witchcraft is a reality; it is not a superstition. Many communities know these powers exist. Many of our Christians seek deliverance, healing and exorcism from other denominations because priests do not realize they have redemptive powers. If we don’t believe in the existence of witchcraft as Satanism, then we cannot deal with it.”

Sr. Bibiana Munini Ngundo stated “Since Christ in the gospels encountered the devil, it is proper for Christians to accept the reality of witchcraft ”

illegal bias

The government has an illegal bias against Witchcraft that violates the U.S. Constitution.

All government officials, including all judges, prosecutors, and police, are officially paid in money that includes the officially established written religious oath of office “In God We Trust”, even though the U.S. Constitution specifically prohibits religious oaths of office.

All federal judges are either Christian or Jew. There are ZERO Buddhist federal judges. There are ZERO Hindu federal judges. There are ZERO Witch federal judges. There are ZERO Islamic federal judges. Statistically it is unambiguously clear that the appointments of federal judges have involved an illegal prohibition against federal judges of any religion other than Christianity or Judaism.

The majority of the U.S. Supreme Court are Roman Catholic and have exercised their majority to vote according to requirements set down by the Roman Catholic Pope under threat of being excommunicated by the Pope.

In the case U.S. v. David Meyers, No. 95-8079, United States Court of Appeals for the Tenth District, September 6, 1996, the judges ruled that Meyer’s Church of Marijuana was not legally a religion and used a set of highly biased tests that were specifically designed to establish Christianity as the only legal religion in the U.S. and specifically prohibit the free exercise of all other religions.

- [what is religion?](#)
- Ultimate Ideas
- Metaphysical Beliefs
- Moral or Ethical System
- Comprehensiveness of Beliefs
- Accoutrements of Religion
 - a. Founder, Propher, or Teacher
 - b. Important Writings
 - c. Gathering Places
 - d. Keepers of Knowledge
 - e. Ceremonies and Rituals
 - f. Structure or Organization
 - g. Holidays
 - h. Diet or Fasting
 - i. Appearance and Clothing
 - j. Propagation

what is religion?

In the case *U.S. v. David Meyers*, No. 95-8079, United States Court of Appeals for the Tenth District, September 6, 1996, the judges ruled that Meyer's Church of Marijuana was not legally a religion and used a set of highly biased tests that were specifically designed to establish Christianity as the only legal religion in the U.S. and specifically prohibit the free exercise of all other religions.

The judges stated in their decision:

"There is no dispute that Meyers' beliefs are sincerely held and that they are substantially burdened by 21 U.S.C. 841 and 846 and 18 U.S.C. 2. The issue is whether his sincerely held beliefs are "religious beliefs," rather than a philosophy or way of life."

There is substantial agreement throughout the archaeological, historical, and religious communities that Am Khent Kemeticism and other forms of ancient Egyptian belief are in fact religion, possibly the oldest religion still being practiced.

From **The Handy Religion Answer Book**, by John Renard (a Roman Catholic), 2002, Visible Ink Press:

"Religion was the very core of ancient Egyptian culture (3500 BCE—950 BCE). It permeated every aspect of life, including art, medicine, and science. Egyptians believed that the gods [sic] had created Egypt as an oasis of order and inherent good amidst the forces of chaos that constantly threatened to overwhelm them. Justice, morality, and beauty — called Ma'at by the Egyptians — consisted of behavior in accordance with that tradition."

"The Egyptian religion featured many deities, some strange but with human features, others clearly non-human, but all responsible for every aspect of life, from birth to death."

The judges continued in their decision to outline a list of tests:

"Keeping in mind that the threshold for establishing the religious nature of his beliefs is low, the court considered the following factors:"

1. Ultimate Ideas
2. Metaphysical Beliefs
3. Moral or Ethical System
4. Comprehensiveness of Beliefs
5. Accoutrements of Religion

- a. Founder, Propher, or Teacher
- b. Important Writings
- c. Gathering Places
- d. Keepers of Knowledge
- e. Ceremonies and Rituals
- f. Structure or Organization
- g. Holidays
- h. Diet or Fasting
- i. Appearance and Clothing
- j. Propagation

pharmacy and sorcery

The Greek word for sorcery or witchcraft is **Pharmakia**, from which we get the modern English word **pharmacy**.

Christians have for centuries been pointing out that the use of drugs is witchcraft and the use of drugs to cast spells is sorcery.

It is no secret to any Christian who knows their own religion and has extensively studied the Christian Bible that the U.S. [Controlled Substance Act](#) is an anti-Witchcraft or anti-sorcery statute.

“Gal 5:20 Sorcery/witchcraft, is from the Greek word, “**Pharmakia**” the same word we get **pharmacy** from. it means the general illicit use of drugs (same application as today) and the use of drugs to cast spells etc.” ... “Ask for discussion: “Who are the two drug dealers of the Bible?” Elymas and Simon: Acts 13:6 ; Acts 8:9” ... “Notice this is illustrative of what Gal 5:20 condemns. These men, called sorcerers, magicians, witchcraft.” — Steve Rudd, author of [Drugs and the Bible: E, Shrooms, Cocaine, Crack, Marijuana](#)

Harper’s Bible Dictionary: “On the lowest level were the ‘imposters’ (2 Tim. 3:13) who played their tricks as do circus magicians today. Between these were the sorcerers, enchanters, and charmers who could cast spells and knew how to use herbs, potions, and drugs.” — quoted by Steve Rudd, author of [Drugs and the Bible: E, Shrooms, Cocaine, Crack, Marijuana](#)

W. E. Vine’s Bible Dictionary: “In sorcery, the use of drugs, whether simple or potent, was generally accompanied by incantations and appeals to occult powers, with the provision of various charms, amulets, etc., professedly designed to keep the applicant or patient from the attention and power of demons, but actually **to impress the applicant with the mysterious resources and powers of the sorcerer.**” — quoted by Steve Rudd, author of [Drugs and the Bible: E, Shrooms, Cocaine, Crack, Marijuana](#)

“We see the high death rate among young people, the threat of violence, the deplorable proliferation of drugs which strike at the deepest roots of youth today. For these reasons, we hear talk of a ‘lost youth’.” — Pope Benedict XVI, Papal Address to Youth, Pacaembu, Brazil, May 10, 2007

potions

Witches are famous for their potions, which are herbal medications made from natural plants, especially cannabis.

“Since the beginning of time, shamans and priest/esses in every human culture have used sacred substances -- hallucinogenic mushrooms, hashish, peyote, wine, to name a few -- to achieve altered states of consciousness, the “divine frenzy” that opens a magician’s mind to the realm beyond the ordinary. When Xtianity imposed on Western culture its puritanical fear of ecstasy, the lore of sacred substances was kept alive by the hidden children of the Old Religion. Don’t believe the rote anti-drug disclaimers printed in popular books on the Craft -- Witches really do mutter enchantments over our cauldrons (or at least our cooking pots) as we stir handfuls of strange herbs into magic potions and flying ointments. The use of mind-altering substances for ritual purposes is as integral to Wicca -- and as historically well attested -- as it is to any other indigenous religion, and we consider the outlawing and persecution of traditional sacred plants such as cannabis (marijuana) and Amanita Muscaria (the “fairy mushroom”) to be a direct violation of Wiccans’ First Amendment right to freedom of religion.” — Lady Passion, author of [General Information about Witchcraft](#)

Christian Bible scholars are well aware that Witchcraft potions are against the laws of Christianity.

“So like a witch that stirs her pot of secret brewing herbs, who then takes a small bottle of the potion and gives it to someone, so too with Elymas and Simon [Acts 13:6 and 8:9]. The witch was a drug dealer. Simon would give hallucinogen drugs like “THC” (cannabis) “Psylocibin” or “Cybelcyblin” (magic mushroom) “Cocaine”, “Heroin” (poppy plant) to someone, wait a few minutes then as the drug starts to set in, start waving his hands around giving the impression that HIS POWER is causing all the pink elephants to fly ” — Steve Rudd, author of [Drugs and the Bible: E, Shrooms, Cocaine, Crack, Marijuana](#)

“Witches are perhaps the most varied of the supernaturals, although The Possessed may rival them. The paradigm by which a Witch does his or her hell-black magic is always different. Sometimes it is readings from cards or the sky, sometimes it is needles in the skin or re-arranging of furniture to tap sick “dragon energy,” sometimes it is chanting and fire, sometimes psychic powers, sometimes it is taking drops of sinister potions and rolling around giggling. Whatever it may be, Witch magic always takes a dire and ironic cost. Witches were responsible for the Vietnam War, for example.” — [the hunter](#), 2007

false claims

Cannabis Witchcraft has been persecuted on the basis of many false claims.

Christians claim that Cannabis Witchcraft is supposedly associated with [Satan](#).

One false claim is that Cannabis Witchcraft is supposedly [dangerous](#).

Another common false claim is that Cannabis Witchcraft is supposedly the cause of [bad weather](#) and [crop failure](#).

false claims of non-existence

With all the persecution of Witchcraft, Witch Hunts, and Witch Trials, ironically many Christians make the claim that Witches supposedly don't exist and that Witchcraft religion doesn't exist.

According to *Wesley's Notes*: "Witchcraft not only gives that honour to the devil which is due to God alone, but bids defiance to the divine providence, wages war with God's government, puts his work into the devil's hand expecting him to do good and evil. By our law, consulting, covenanting with, invoking or employing any evil spirit to any intent whatever, and exercising any enchantment, charm, or sorcery, whereby hurt shall be done to any person, is made felony, without benefit of clergy; also pretending to tell where goods lost or stolen may be found, is an iniquity punishable by the judge, and the second offence with death. This was the case in former times. But we are wiser than our fore - fathers. **We believe, no witch ever did live!** At least, not for these thousand years."

Satanic claims

Cannabis Witchcraft has been persecuted on the basis of many false claims.

One false claim is the Cannabis Witchcraft is supposedly Satanic, worshipping the Christian Satan or Devil.

No Christian police officer or prosecutor has *ever* proven the existence of Satan or the Devil in *any* American court of law.

Christian chroniclers recording the proceedings of Witch Trials would automatically write in the word “Devil” whenever a defendant referred to his or her God. This led to huge number of trial transcripts where accused Witches speak of their worship of the Devil when they were actually speaking of worship of God or Goddess.

As recently as April 20, 2007, the *Los Angeles Times* ran a front page article (California section) entitled “The case of the missing remains: a real witch hunt” in which Times Staff Writer Garrett Therolf quotes Detective Jim Geist of the Santa Ana Police Department’s robbery unit falsely claiming that witches were robbing graves in Santa Ana.

Buried deep in the article on the next to last page of the section was the information that Det. Geist discovered through fingerprint evidence and a confession that the robbery wasn’t done by witches, but instead done by mentally ill 42-year-old woman named Maria Isabel Foster, who had been arrested for writing bad checks.

Det. Geist is quoted by the *Los Angeles Times* as saying that interviews with neighbors “confirmed his suspicions” when unnamed sources supposedly told the detective that “she lived with a human skeleton and spoke of an interest in witchcraft”. The Santa Ana robbery detective said that when he interviewed Foster on January 4th that she was “shy and distant” and “didn’t want to talk about witchcraft” but the detective said “I told her I was into it and I wanted to understand” and she replied “She wanted to be understood.”

Yes, the detective admitted to the newspaper that he lied to a mentally ill woman and was able to bully her into admitting that she wanted to be understood!



The Devil is frequently depicted as a male animal figure.

The front page portion of the *Los Angeles Times* article claims that Det. Geist “calls believers in witchcraft creeps” and that his investigation into the stolen cremation remains involved “tapping ‘Orange County witchcraft’ and ‘Orange County satanic worship’ into the Yahoo search engine.”

The newspaper also reports that Det. Geist claimed to have numerous times, as a patrolman, “enter[ed] the fenced-in cemetery at night without a flashlight” to investigate “seances and strange rituals”, but the police officer was never able to catch anyone in the act because “black-caped figures would run away when he drew near.”

Every member of the Santa Ana Police Department, including Detective Jim Geist, is officially paid in money that includes the written religious oath of office “In God We Trust”.

In 1484 Pope Innocent VIII issued an edict entitled *Summis desiderantes affectibus* alleging that many men and women in collusion with the Devil supposedly caused disease and pestilence, harmed harvests and cattle, and perpetuated other heinous crimes.

In 1595 Nicholas Remy of France write in *Daemonolatreia* “Whatever is not normal is due to the Devil.”

In 1851 the Roman Catholic Church (RCC) accused Eugene Vintras of the Church of Carmel in France of conducting Black Masses and engaging in homosexual acts as part of his rituals.

According to *Wesley's Notes*: Witchcraft not only gives that honour to the devil which is due to God alone, but bids defiance to the divine providence, wages war with God's government, puts his work into the devil's hand expecting him to do good and evil. By our law, consulting, covenanting with, invoking or employing any evil spirit to any intent whatever, and exercising any enchantment, charm, or sorcery, whereby hurt shall be done to any person, is made felony, without benefit of clergy; also pretending to tell where goods lost or stolen may be found, is an iniquity punishable by the judge, and the second offence with death. This was the case in former times. But we are wiser than our fore - fathers. We believe, no witch ever did live! At least, not for these thousand years.

supposed danger

One of the false claims against Cannabis Witchcraft has been the claim that cannabis and Witchcraft in general are supposedly dangerous.

“Marihuana is the most frightening and vicious drug ever to hit New Orleans.” — New Orleans Public Safety Commission, 1910

“Hasheesh goads users to blood lust.” — Hearst Newspapers, 1932

“Marihuana is the most violent drug in the history of mankind.” — H.J. Anslinger, Federal Bureau of narcotics, quoted in Hearst Newspapers, 1938

“If the hideous monster of Frankenstein came face to face with marihuana, he would drop dead of fright.” — H.J. Anslinger, Federal Bureau of narcotics, testimony before Congress, 1937

“Marihuana is more harmful than habit-forming opium, inducing fits of temporary insanity.” — Newsweek magazine, January 15, 1945

“Marihuana leads to pacifism and Communist brainwashing.” — H. J. Anslinger, Federal Bureau of Narcotics, testimony before Congress, 1948

disease

One of the false claims against Cannabis Witchcraft has been the claim that cannabis and Witchcraft in general are supposedly the cause of disease.

In 1484 Pope Innocent VIII issued an edict entitled *[Summis desiderantes affectibus](#)* alleging that many men and women in collusion with the Devil supposedly caused disease and pestilence, harmed harvests and cattle, and perpetuated other heinous crimes.

bad weather

One of the false claims against Cannabis Witchcraft has been the claim that cannabis and Witchcraft in general are supposedly the cause of bad weather.

In 1456 and 1457 there was unusually bad weather in Metz, France, harming many of the local crops. This was attributed to Witchcraft and major Witch Hunts resulted in numerous deaths.

In 1488, in Metz, France, an unusually cold summer (the result of the European mini-Ice Age) was blamed on Witchcraft and twenty-eight (28) persons were burned alive for Witchcraft.

agricultural failure

One of the false claims against Cannabis Witchcraft has been the claim that cannabis and Witchcraft in general are supposedly the cause of agricultural failures.

Some of the forms of agricultural failures attributed to Witches include:

crop failure
chicken eggs failure
milk cow failure

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crop failure

One of the false claims against Cannabis Witchcraft has been the claim that cannabis and Witchcraft in general are supposedly the cause of crop failure.

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chicken eggs failure

One of the false claims against Cannabis Witchcraft has been the claim that cannabis and Witchcraft in general are supposedly the cause of hens not laying chicken eggs.

Martin Luther, when interpreting [Exodus 22:18](#), claimed that with the help of the Devil, Witches could steal milk simply by thinking of a cow.

In his Small Catechism, Martin Luther taught that Witchcraft was a sin against the second commandment and prescribed the Biblical death penalty for it in a “table talk”.

On 25 August 1538 there was much discussion about witches and sorceresses who steal chicken eggs out of nests, or steal milk and butter. Doctor Luther said “One should show no mercy to these [women]; I would burn them myself, for we read in the Law that the priests were the ones to begin the stoning of criminals.”

The original Latin and German text:

25, Augusti multa dicebant de veneficis et incantatricibus, quae ova ex gallinis et lac et butyrum furarentur. Respondit Lutherus: Cum illis nulla habenda est misericordia. Ich wolte sie selber verprennen, more legis, ubi sacerdotes reos lapidare incipiebant.”

milk cow failure

One of the false claims against Cannabis Witchcraft has been the claim that cannabis and Witchcraft in general are supposedly the cause of milk cows going dry and failing to produce milk.

In 1484 Pope Innocent VIII issued an edict entitled *Summis desiderantes affectibus* alleging that many men and women in collusion with the Devil supposedly caused disease and pestilence, harmed harvests and cattle, and perpetuated other heinous crimes.

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racism

Racism is at the very heart of the Cannabis Witch Hunt.

“Marihuana makes darkies think they’re as good as white men.” — H.J. Anslinger, Federal Bureau of Narcotics, 1920s

“Marihuana is responsible for the raping of white women by crazed negroes.” — Hearst Newspapers, 1930

“Marihuana influenced negroes to look at white people in the eye, step on white men’s shadows, and look at a white woman twice.” — Hearst Newspapers, 1935

“Negro entertainers with their jazz and swing music are declared an outgrowth of marihuana use which possesses white women to tap their feet.” — H.J. Anslinger, Federal Bureau of Narcotics, testimony before Congress, 1937

laughter

Laughter is one of the signs of Cannabis Witchcraft.

Christians hunting Witches would look for laughter and giggling because this was proof that a person had practiced Witchcraft by smoking cannabis.

The laughter was proof that the spirit of [Diana](#), the Wild One, had entered the person as a result of Witchcraft Sorcery. The Goddess Diana was viewed as the source of magick. The cannabis smoke was how the Goddess Diana gave magickal power to Witches. The incense smoke was the Ba en Aset (soul of the Goddess) of the Bast plant (cannabis hemp or marijuana). The ancient Egyptian phrase was Ntr Sentra, literally meaning the Breath of the Goddess. The exhaled smoke empowers the words of the Witch, turning ordinary words into powerful magick spells.

Every person (of any religion, including Christians) who giggles or laughs as the result of cannabis intoxication is unambiguously engaging in Cannabis Witchcraft.

“Witches are perhaps the most varied of the supernaturals, although The Possessed may rival them. The paradigm by which a Witch does his or her hell-black magic is always different. Sometimes it is readings from cards or the sky, sometimes it is needles in the skin or re-arranging of furniture to tap sick “dragon energy,” sometimes it is chanting and fire, sometimes psychic powers, sometimes it is taking drops of sinister potions and rolling around giggling. Whatever it may be, Witch magic always takes a dire and ironic cost. Witches were responsible for the Vietnam War, for example.” — [the hunter](#), 2007

laws against cannabis Witchcraft

The law against cannabis Witchcraft all goes back to early Judaism. The Jewish Torah, Christian Bible, and Islamic Koran (Quran) all specifically call for the death penalty for Witchcraft. This is the basis for all U.S. federal and state laws against cannabis Witchcraft.

verses

The main verse against Cannabis Witchcraft is [Exodus 22:18](#).

[Additional verses](#) against Cannabis Witchcraft are found throughout the Bible and Torah.

church law

Canon Eposcopi passed in 906 C.E. This collection of church laws declared that belief in Witchcraft was heresy.

[Summis desiderantes affectibus](#) is a 1484 edict issued by Pope Innocent VIII alleging that many men and women were in collusion with the [Devil](#). All Christians were required to assist the two Dominican monks, Jacob Sprenger and Heinrich Kramer, placed in charge of handling this supposed Witchcraft problem.

French law

In 500 C.E., the French government passed a Witchcraft law requiring proof that an act of evil had been committed. Otherwise the accuser had to pay damages. Under modern U.S. law, DEA agents and other Christian police are immune from having to pay damages for false accusations.

In 1390, the Parlement de Paris encouraged secular courts to take over from the Inquisition. The first French secular Witch Trial was held that year and over the next few hundred years cases moved from Church Inquisitions to secular Witch Trials.

In 1579, the French government extended the death penalty to everyone who practiced any form of divination.

United States law

In 1970 the U.S. Congress passed the [Controlled Substances Act](#) (CSA) as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970.

Exodus 22:18

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The basic law on the matter appears in the verse Exodus 22:18 of the Jewish Torah and the Christian Bible.

Exodus 22:18

Exodus 22:18 “Thou shalt not suffer a **witch** to live. 21st Century King James Version (KJ21)

Exodus 22:18 Thou shalt not suffer a sorceress to live. American Standard Version (ASV)

Exodus 22:18 You shall not allow a woman to live who practices sorcery. Amplified Bible

Exodus 22:18 Put to death any woman who does evil magic. The Answer

Exodus 22:18 Any woman using unnatural powers or secret arts is to be put to death. Bible in Basic English (BBE)

Exodus 22:18 Death is the punishment for **witchcraft**. Contemporary English Version (CEV)

Exodus 22:18 Thou shalt not suffer a **witch** to live. Darby Translation (DBY)

2 Mosebok 22:18 En trollkvinne skal du ikke la leve Det Norsk Bibelselskap 1930 Norse

2 Mosebog 22:18 En Troldkvinde må du ikke lade leve. Dette er Biblen på dansk Danish

2 Mose 22:18 Jeder, der bei einem Tier liegt, muß getötet werden. Elberfelder German

Exodus 22:18 “You shall not permit a sorceress to live. English Standard Version (ESV)

Exodus 22:18 Never let a **witch** live. God's Word Translation (GWT)

Exodus 22:18 Put to death any woman who practices magic. Good News Version

Egzòd Se pou nou touye tout fanm k'ap fè maji. Haitian Creole Version Creole

Exodus 22:18 Een tovenares moet worden gedood. Het Boek Dutch

Exodus 22:18 “You must not allow a sorceress to live. Holman Christian Standard Bible (HCSB)

2 Mózes 22:18 Varázslò asszonyt ne hagyj életben. Hungarian KÁiroli Hungarian

Önnur bók Móse 22:18 Eigi skalt þú láta galdrakonu lífi halda. Icelandic Bible Icelandic

Exodus 22:18 You shall not allow a sorceress to live. Jerusalem Bible

Éxodo 22:18 Não permitirás que viva uma feiticeira. João Ferreira de Almeida Atualizada Portuguese

Exodus 22:18 Thou shalt not suffer a sorceress to live. JPS Tanakh

Exodus 22:18 Thou shalt not suffer a **witch** to live. King James Version/Authorized Version (KJV)

Exode 22:18 Quiconque s'accouple à une bête sera puni de mort. La Bible du Semeur French

Éxodo 22:18 No dejarás con vida a la hechicera. La Biblia de las Américas Spanish

Esodo 22:18 Non lascerai vivere la strega. La Nuova Diodati (LND) Italian

Exodus 22:18 A sorceress shall be put to death. Living Bible

Exode 22:18 Tu ne laisseras point vivre la magicienne. Louis Segond French

2 Mose 22:18 Die Zauberinnen sollst du nicht leben lassen. Luther Bibel 1545 German

Exodus 22:18 Kei tukua e koe te wahine makutu kia ora. Maori Bible Maori

Exodus 22:18 “Don’t let a sorceress live. The Message

Exodus 22:18 Allow no sorceress to live. Modern Language Bible

Exodus 22:18 You shall not allow any sorceress to live. James Moffatt Translation

Exodus 22:18 You shall not let a sorceress live. New American Bible

Exodus 22:18 “You shall not allow a sorceress to live. New American Standard Bible

(NASB)

Exodus 22:18 Put to death any woman who does evil magic. New Century Version

Exodus 22:18 “Do not let a woman who does evil magic stay alive. Put her to death. New International Reader’s Version (NIRV)

Exodus 22:18 “Do not allow a soceress to live. New International Version (NIV)

Exodus 22:18 Do not allow a sorceress to live. New International Version - UK (NIVUK)

Exodus 22:18 “You shall not permit a sorceress to live. New King James Version (NKJV)

Exodus 22:18 “Do not allow a woman to live who does **witchcraft**. New Life Version (NLV)

Exodus 22:18 “You must not allow a sorceress to live. New Living Translation (NLT)

Exodus 22:18 You shall not permit a female sorcerer to live. New Revised Standard version

Exodus 22:18 You must not preserve a sorceress alive. New World Translation

Éxodo 22:18 »No dejes con vido a ninguna hechicera. Nueva Versión Internacional Spanish

Éxodo 22:18 Os feiticeiros terão de morrer. O Livro Portuguese

Exodus 22:18 Death is the punishment for **witchcraft**. The Promise: Contemporary English Version

Éxodo 22:18 A la hechicera no dejarás que viva. Reina-Valera Antigua Spanish

Éxodo 22:18 A la hechicera no dejarás que viva. Reina-Valera 1960 Spanish

Éxodo 22:18 »A la hechicera no dejarás que viva. Reina-Valera 1995 Spanish

Exodus 22:18 You must not allow a **witch** to live. Revised English Bible

Exodus 22:18 You shall not permit a sorceress to live. Revised Standard Version

Exod 22:18 Pe vra ÷ jitoare sa n’o las ü i sa ÷ tra ÷ iasca ÷. Romanian Romanian

Exodus 22:18 “Do not allow a sorceress to live. Today’s New International Version (TNIV)

Exodus 22:18 Thou shalt not suffer a **witch** to live. Webster’s Bible Translation (WBS)

Exodus 22:18 You shall not allow a sorceress to live. World English Bible (WEB)

Exodus 22:18 A **witch** thou dost not keep alive. Young's Literal translation

According to the *Scofield Reference Bible* this Hebrew verse was originally written in the year 1491 B.C.E.

According to *Wesley's Notes*: Witchcraft not only gives that honour to the devil which is due to God alone, but bids defiance to the divine providence, wages war with God's government, puts his work into the devil's hand expecting him to do good and evil. By our law, consulting, covenanting with, invoking or employing any evil spirit to any intent whatever, and exercising any enchantment, charm, or sorcery, whereby hurt shall be done to any person, is made felony, without benefit of clergy; also pretending to tell where goods lost or stolen may be found, is an iniquity punishable by the judge, and the second offence with death. This was the case in former times. But we are wiser than our fore - fathers. We believe, no witch ever did live! At least, not for these thousand years.

other verses against Witches

The main verse against Cannabis Witchcraft is [Exodus 22:18](#).

related prohibitions

Leviticus 19:26 “You shall not eat anything with the blood, nor practice divination or soothsaying. New American Standard Bible (NASB)

Leviticus 19:31 “Do not turn to mediums or spiritists; do not seek them out to be defiled by them. I am the LORD your God. New American Standard Bible (NASB)

Leviticus 19:31 “Do not turn to mediums or seek out spiritists, for you will be defiled by them. I am the LORD your God. New International Version (NIV)

Leviticus 20:6 As for the person who turns to mediums and to spiritists, to play the harlot after them, I will also set My face against that person and will cut him off from among his people. New American Standard Bible (NASB)

Leviticus 20:6 “I will set my face against the person who turns to mediums and spiritists to prostitute himself by following them, and I will cut him off from his people. New International Version (NIV)

Leviticus 20:27 “No a man or a woman who is a medium or a spiritist shall surely be put to death. They shall be stoned with stones, their bloodguiltiness is upon them.” New American Standard Bible (NASB)

Leviticus 20:27 “A man or woman who is a medium or spiritist among you must be put to death. You are to stone them; their blood will be on their own heads.” New International Version (NIV)

Deuteronomy 18:10 “There shall not be found among you anyone who makes his son or his daughter pass through the fire, one who uses divination, one who practices witchcraft, or one who interprets omens, or a sorcerer, New American Standard Bible (NASB)

Deuteronomy 18:11 or one who casts a spell, or a medium, or a spiritist, or one who calls up the dead.” New American Standard Bible (NASB)

I Samuel 15:23 “For rebellion is as the sin of divination, And insubordination is as iniquity and idolatry Because you have rejected the word of the LORD, He has also rejected you from being king.” New American Standard Bible (NASB)

I Samuel 28:3 Now Samuel was dead, and all Israel had lamented him and buried him in Ramah, his own city And Saul had removed from the land those who were mediums and spiritists. New American Standard Bible (NASB)

Jeremiah 27:9 “But as for you, do not listen to your prophets, your diviners, your dreamers, your soothsayers or your soecers who speak to you, saying, ‘You will not server the king of Babylon.’ New American Standard Bible (NASB)

Jeremiah 27:10 “For they prophesy a lie to you in order to remove you far from your land; and I will drive you out and you will perish. New American Standard Bible (NASB)

Malachi 3:5 “Then I will draw near you for judgment; and I wwill be a swift witness against the sorcerers and against the adulterers and against those who swear falsely, and against those who oppress the wage earner in his wages, the widow and the orphan, and those who turn aside the alien and do not fear Me,” says the LORD of hosts. New American Standard Bible (NASB)

Witch of Endor

The main verse against Cannabis Witchcraft is [Exodus 22:18](#).

The story of the Witch of Endor highlights the dangers to the lives of Witches in ancient Israel.

Witch of Endor

I Samuel 28:3 Now Samuel was dead, and all Isreal had mourned for him and buried him in his own town of Ramah. Saul had expelled the mediums and spiritists from the land. New International Version (NIV)

I Samuel 28:7 Saul then said to his attendants, "Find me a woman who is a medium, so I may go and inquire of her."

"There is one in Endor," they said. New International Version (NIV)

I Samuel 28:8 So Saul disguised himself, putting on other clothes, and at night he and two men went to the woman. "Consult a spirit for me," he said, "and bring up for me the one I name." New International Version (NIV)

I Samuel 28:9 But the woman said to him, "Surely you know what Saul has done. He has cut off the mediums and spiritists from the land. Why have you set a trap for my life to bring about my death?" New International Version (NIV)

I Samuel 28:10 Saul swore to her by the LORD, "As surely as the LORD lives, you will not be punished for this." New International Version (NIV)

I Samuel 28:11 Then the woman asked, "Whom shall I bring up for you?"

"Bring up Samuel," he said. New International Version (NIV)

I Samuel 28:12 When the woman saw Samuel, she cried out at the top of her voice and said to Saul, "Why have you deceived me? You are Saul!" New International Version (NIV)

I Samuel 28:13 The king said to her, "Don't be afraid. What do you see?"

The woman said, "I see a spirit coming up out of the ground." New International Version (NIV)

I Samuel 28:14 "What does he look like?" he asked.

"An old man wearing a robe is coming up," she said.

Then Saul knew it was Samuel, and he bowed down and prostrated himself with his face to the ground. New International Version (NIV)

I Samuel 28:15 Samuel said to Saul, “Why have you disturbed me by bringing me up?”

“I am in great distress,” Saul said. “The Philistines are fighting against me, and God has turned away from me. He no longer answers me, either by prophets or by dreams. So I have called on you to tell me what to do.” New International Version (NIV)

I Samuel 28:16 Samuel said, “Why do you consult me, now that the LORD has turned away from you and become your enemy? New International Version (NIV)

I Samuel 28:17 “The LORD has done what he predicted through me. The LORD has torn the kingdom out of your hands and given it to one of your neighbors — to David. New International Version (NIV)

I Samuel 28:18 “Because you did not obey the LORD or carry out his fierce wrath against the Amalekites, the LORD has done this to you today. New International Version (NIV)

I Samuel 28:19 “The LORD will hand over both Israel and you to the Philistines, and tomorrow you and your sons will be with me. The LORD will also hand over the army of Israel to the Philistines.” New International Version (NIV)

I Samuel 28:20 Immediately Saul fell full length on the ground, filled with fear because of Samuel’s words. His strength was gone, for he had eaten nothing all that day and night. New International Version (NIV)

I Samuel 28:21 When the woman came to Saul and saw that he was greatly shaken, she said, “Look, your maidservant has obeyed you. I took my life in my hands and did what you told me to do. New International Version (NIV)

I Samuel 28:22 “Now please listen to your servant and let me give you some food so you may eat and have the strength to go on your way.” New International Version (NIV)

I Samuel 28:23 He refused and said, “I will not eat.”

But his men joined the woman in urging him, and he listened to them. He got up from the ground and sat on the couch. New International Version (NIV)

I Samuel 28:24 The woman had a fattened calf at the house, which she butchered at once. She took some flour, kneaded it and baked bread without yeast. New International Version (NIV)

I Samuel 28:25 Then she set it before Saul and his men, and they ate. That same night they got up and left. New International Version (NIV)

Papal Bull of 1484

On December 5th, 1484, Pope Innocent VIII issued an edict (Bull) entitled *Summis desiderantes affectibus* alleging that many men and women were in collusion with the Devil. All Christians were required to assist the two Dominican monks, Jacob Sprenger and Heinrich Kramer, placed in charge of handling this supposed Witchcraft problem.

Pope Innocent VIII put Sprenger and Kramer in charge of seeking out and fighting people who supposedly in association with [Satan](#) to cause disease and pestilence, harm harvests and cattle, and perpetuate other heinous crimes.

full text of the Papal Bull of 1484:

Innocent VIII: BULL *Summis desiderantes*, Dec. 5th, 1484

Bullarium Romanum (Taurinensis editio), sub, anno 1484.

Innocent, bishop, servant of the servants of God, *Ad futuram rei memoriam*

Desiring with supreme ardor, as pastoral solicitude requires, that the catholic faith in our days everywhere grow and flourish as much as possible, and that all heretical depravity be put far from the territories of the faithful, we freely declare and anew decree this by which our pious desire may be fulfilled, and, all errors being rooted out by our toil as with the hoe of a wise laborer, zeal and devotion to this faith may take deeper hold on the hearts of the faithful themselves.

It has recently come to our ears, not without great pain to us, that in some parts of upper Germany, as well as in the provinces, cities, territories, regions, and dioceses of Mainz, Koln, Trier, Salzburg, and Bremen, many persons of both sexes, heedless of their own salvation and forsaking the catholic faith, give themselves over to devils male and female, and by their incantations, charms, and conjurings, and by other abominable superstitions and sortileges, offences, crimes, and misdeeds, ruin and cause to perish the offspring of women, the foal of animals, the products of the earth, the grapes of vines, and the fruits of trees, as well as men and women, cattle and flocks and herds and animals of every kind, vineyards also and orchards, meadows, pastures, harvests, grains and other fruits of the earth; that they afflict and torture with dire pains and anguish, both internal and external, these men, women, cattle, flocks, herds, and animals, and hinder men from begetting and women from conceiving, and prevent all consummation of marriage; that, moreover, they deny with sacrilegious lips the faith they received in holy baptism; and that, at the instigation of the enemy of mankind, they do not fear to commit and perpetrate many other abominable offences and crimes, at the risk of their own souls, to the insult of the divine majesty and to the pernicious example and scandal of multitudes. And, although our beloved sons Henricus Institoris and Jacobus Sprenger, of the order of Friars

Preachers, professors of theology, have been and still are deputed by our apostolic letters as inquisitors of heretical pravity, the former in the aforesaid parts of upper Germany, including the provinces, cities, territories, dioceses, and other places as above, and the latter throughout certain parts of the course of the Rhine; nevertheless certain of the clergy and of the laity of those parts, seeking to be wise above what is fitting, because in the said letter of deputation the aforesaid provinces, cities, dioceses, territories, and other places, and the persons and offences in question were not individually and specifically named, do not blush obstinately to assert that these are not at all included in the said parts and that therefore it is illicit for the aforesaid inquisitors to exercise their office of inquisition in the provinces, cities, dioceses, territories, and other places aforesaid, and that they ought not to be permitted to proceed to the punishment, imprisonment, and correction of the aforesaid persons for the offences and crimes above named. Wherefore in the provinces, cities, dioceses territories, and places aforesaid such offences and crimes, not without evident damage to their souls and risk of eternal salvation, go unpunished.

We therefore, desiring, as is our duty, to remove all impediments by which in any way the said inquisitors are hindered in the exercise of their office, and to prevent the taint of heretical pravity and of other like evils from spreading their infection to the ruin of others who are innocent, the zeal of religion especially impelling us, in order that the provinces, cities, dioceses, territories, and places aforesaid in the said parts of upper Germany may not be deprived of the office of inquisition which is their due, do hereby decree, by virtue of our apostolic authority, that it shall be permitted to the said inquisitors in these regions to exercise their office of inquisition and to proceed to the correction, imprisonment, and punishment of the aforesaid persons for their said offences and crimes, in all respects and altogether precisely as if the provinces, cities, territories, places, persons, and offences aforesaid were expressly named in the said letter. And, for the greater sureness, extending the said letter and deputation to the provinces, cities, dioceses, territories, places, persons, and crimes aforesaid, we grant to the said inquisitors that they or either of them joining with them our beloved son Johannes Gremper, cleric of the diocese of Coonstance, master of arts, their present notary, or any other notary public who by them or by either of them shall have been temporarily delegated in the provinces, cities, dioceses, territories, and places aforesaid, may exercise against all persons, of whatsoever condition and rank, the said office of inquisition, correcting, imprisoning, punishing and chastising, according to their deserts, those persons whom they shall find guilty as aforesaid.

And they shall also have full and entire liberty to propound and preach to the faithful word of God, as often as it shall seem to them fitting and proper, in each and all of the parosh churches in the said provinces, and to do all things necessary and suitable under the aforesaid circumstances, and likewise freely and fully to carry them out.

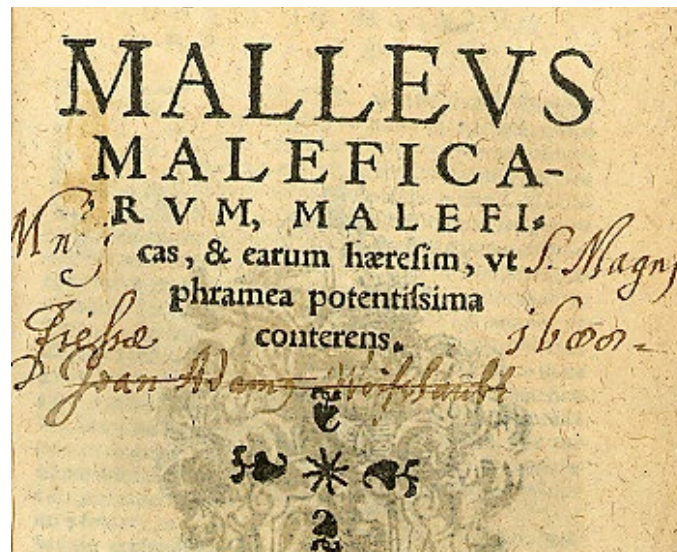
Malleus Maleficarum

Malleus Maleficarum or “the Witch’s Hammer” was the primary Roman Catholic document about how to persecute Witches. It was written by Jacob Sprenger and Heinrich Kramer, Dominican monks working on orders from Pope Innocent VIII.

In 1484 Pope Innocent VIII issued an edict entitled *Summis desiderantes affectibus* alleging that many men and women were in collusion with the Devil. All Christians were required to assist the two Dominican monks, Jacob Sprenger and Heinrich Kramer, placed in charge of handling this supposed Witchcraft problem.

Pope Innocent VIII put Sprenger and Kramer in charge of seeking out and fighting people who supposedly in association with [Satan](#) to cause disease and pestilence, harm harvests and cattle, and perpetuate other heinous crimes.

In 1486 Sprenger and Kramer published *Malleus Maleficarum* or “the Witch’s Hammer”, codifying the charges, interrogation procedures, and judicial resolutions for Witchcraft trials.



cover of the seventh Cologne edition, 1520

Latin Text: “MALLEUS MALEFICARUM, Maleficas, & earum h³/₄resim, ut phramea potentissima conterens”

English Translation: “The Hammer of Witches, smashing the Witches and their heresies with a mighty spear.”

Martin Luther

Martin Luther, the founder of Lutherism and Protestantism, was an active persecutor of Witches.

In 1517 Martin Luther posted his theses, resulting in large scale wars and other extremes of violence between Protestants and Roman Catholics.

The followers of Luther believed that the Roman Catholics were inspired by the [Devil](#), resulting in a major increase of Witch Trials. The Roman Catholics responded with the same charges of Satanic inspiration against the Protestants.

Martin Luther, when interpreting [Exodus 22:18](#), claimed that with the help of the Devil, Witches could steal milk simply by thinking of a cow.

In his Small Catechism, Martin Luther taught that Witchcraft was a sin against the second commandment and prescribed the Biblical death penalty for it in a “table talk”.

On 25 August 1538 there was much discussion about witches and sorceresses who steal chicken eggs out of nests, or steal milk and butter. Doctor Luther said “One should so no mercy to these [women]; I would burn them myself, for we read in the Law that the priests were the ones to begin the stoning of criminals.”

The original Latin and German text:

25, Augusti multa dicebant de veneficis et incantatricibus, quae ova ex gallinis et lac et butyrum furarentur. Respondit Lutherus: Cum illis nulla habenda est misericordia. Ich wolte sie selber verprennen, more legis, ubi sacerdotes reos lapidare incipiebant.”

separation of Church and State

The primary purpose of the separation of Church and State was to put an end to the horrors of the Witch Trials and Witch Hunts.

The American Revolution (1776) and French Revolution (1789) marked the end to the widespread use of the Witch Trials in Western society by confirming the separation of secular and ecclesiastic powers.

U.S. laws against Cannabis Witchcraft, such as the [Controlled Substance Act \(CSA\)](#), mark a return to secular trials for religious “crimes”.

“We see the high death rate among young people, the threat of violence, the deplorable proliferation of drugs which strike at the deepest roots of youth today. For these reasons, we hear talk of a ‘lost youth’.” — Pope Benedict XVI, Papal Address to Youth, Pacaembu, Brazil, May 10, 2007

Controlled Substance Act (CSA)

In 1970 the U.S. Congress passed the Controlled Substances Act (CSA) as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970.

Under the CSA, cannabis tetrahydrocannabinols (including marijuana, hashish, and hashish oil) is designated by Congress as a Schedule I substance, supposedly “having no medical value” and therefore illegal to “manufacture, distribute, or dispense; or possess with intent to manufacture, distribute, or dispense.”

Severe penalties include a mandatory minimum of 10 year prison sentence a maximum of life in prison for more than 1,000 kilograms or 1,000 plants. The mandatory minimum for 100 to 1,000 kilograms or 100 to 1,000 plants is five years in prison and a maximum of 40 years in prison.

The sentence for less than 50 kilograms (unless there are more than 50 plants) is a maximum of five years in federal prison.

For “simple possession” of “small amounts”, the first offense has a maximum sentence of one year in federal prison. On a second offense there is a minimum of 90 days in prison. On a third or subsequent offense there is a maximum of three years in prison. Distribution of “small amounts” of cannabis “for no financial remuneration” (note that means no payment of any kind) has the same penalties.

Under CSA Section 859, if a person 18 years old or older sells more than five grams of cannabis to a person under the age of 21 (even if the person purchasing is older than the person selling), the maximum sentence is doubled. On the second offense, the maximum penalty is tripled.

Under CSA Section 860, manufacturing (growing) or sale of cannabis within 1,000 feet of a school (including any university or college campus) or public housing facility or within 100 feet of a public youth center, pool, or arcade, results in the maximum sentence being doubled. On the second offense, the maximum penalty is tripled. If found guilty under this section, a person is *not* eligible for probation, suspension of the sentence, or early parole.

What possible reason could the U.S. government have for such Draconian penalties for cannabis? It is because Christianity has always imposed Draconian penalties for Witchcraft, including [torture](#) and the [death penalty](#). The Controlled Substances Act imposes harsher penalties for cannabis than for rape, murder, and torture because the Christian judges and Congresspersons consider Cannabis Witchcraft to be a more serious religious offense than violent crimes.

conspiracy

A favorite tactic used by Christian law enforcement officers in their Cannabis Witch Hunt is to bring charges of “conspiracy” against innocent people. The charge of conspiracy doesn’t require any proof other than the unsubstantiated word of a law enforcement officer and can be used to put pressure on defendants by arresting friends and family and can just be used out of malicious cruelty.

Walter Cronkite, famous as long time anchor of CBS Evening News and in the 1970s called “the most trusted man in America”, wrote on February 23, 2006:

“Nicole Richardson was 18-years-old when her boyfriend, Jeff, sold nine grams of LSD to undercover federal agents. She had nothing to do with the sale. There was no reason to believe she was involved in drug dealing in any way.”

“But then an agent posing as another dealer called and asked to speak with Jeff. Nicole replied that he wasn’t home, but gave the man a number where she thought Jeff could be reached.”

“An innocent gesture? It sounds that way to me. But to federal prosecutors, simply giving out a phone number made Nicole Richardson part of a drug dealing conspiracy. Under draconian mandatory minimum sentences, she was sent to federal prison for ten years without possibility of parole.”

“To pile irony on top of injustice, her boyfriend - who actually knew something about dealing drugs - was able to trade information for a reduced sentence of five years. Precisely because she knew nothing, Nicole had nothing with which to barter.”

Borders and Customs

Customs officials do *not* need a search warrant. They can initiate a search on pure whim at any time.

Searches can be initiated because the Customs officials don't like your looks or think you look like a Witch.

Customs officials can initiate searches because you have recently crossed the border several times.

Customs officials can initiate a search because your name or a name similar to yours appears in their secret computer lists.

Customs officials, border patrols, and the police can initiate a search if you are a male in a rented vehicle near the border at night.

Customs officials can search your vehicle with a dog, search your vehicle's contents (including locked luggage) with a dog, and physically search your person.

The U.S. government places remote wireless sensors near the border to detect persons attempting to cross the border at unmanned locations. Border patrol officers are stationed along the border and respond to these sensors very quickly.

Border Patrol and other police can search anyone who has crossed the border and not yet stopped and let someone in or out of their vehicle.

arrest

Arrest for cannabis Witchcraft can be a harrowing experience.

If you are in a public place with lots of people around, then the arrest will probably be somewhat professional, especially if anyone pulls out a video camera or cellphone with camera.

But if you are arrested someplace outside of public view, the arrest will be very brutal. The police will beat you up and may engage in serious torture. The police might even shoot to kill.

Try to be as polite and as cooperative as humanly possible, no matter how ridiculous or humiliating or violent the police actions. There is a chance (especially in public) that the police might go lightly on you.

While it will be tempting to defend yourself against the police brutality, resist the temptation.

Any resistance to police brutality is an additional criminal offense.

Even entering a defensive posture, such as the fetal position, is an additional crime (resisting arrest). You are required by law to do everything in your power to make your vital organs clear and unblocked targets for police aggression.

Going limp or becoming unconscious is an additional crime (resisting arrest). Do everything in your power to stay conscious throughout your beating.

fabricated evidence

One of the most important tools used by Christian law enforcement officers (LEO) in their Cannabis Witch Hunts is the fabrication of evidence.

Courts (whose judges pledge the official U.S. government oath of office “In God We Trust”) rarely allow defense attorneys to challenge fabricated evidence because when it is proven that a police officer is fabricating evidence it can call into question hundreds or thousands of convictions in previous Witch Trials

Even when it is proven that the police fabricated evidence, the judges, prosecutors, and law enforcement officers who participated in the Witch Trial are completely immune from civil lawsuits for damages because of the doctrine that those acting in the interest of the Church have sovereign immunity against any consequences for their illegal actions.

Walter Cronkite, famous as long time anchor of CBS Evening News and in the 1970s called “the most trusted man in America”, wrote on February 23, 2006:

“In Tulia, Texas, an investigator fabricated evidence that sent more than one out of every ten of the town’s African American residents to jail on trumped-up drug charges in one of the most despicable travesties of justice this reporter has ever seen.”

torture

In 1604 King James I of England issued his statute against Witchcraft, in which the king wrote that Witches are “loathe to confess without torture.”

In Germany confessions were usually obtained under torture, following a format established by Roman Emperors Constantine, Valentine, and Valens in the fourth century. As a result, the vast majority of records from German Witch Trials in the 1500s and 1600s are repetitive and monotonous.

The [Malleus Maleficarum](#) states: “He must not be too quick to subject a witch to examination, but must pay attention to certain signs which will follow. And he must not be too quick for this reason: unless God, through a holy Angel, compels the devil to withhold his help from the witch, she will be so insensible to the pains of torture that she will sooner be torn limb from limb than confess any of the truth. But the torture is not to be neglected for this reason, for they are not equally endowed with this power, and also the devil sometimes of his own will permits them to confess their crimes without being compelled by a holy Angel.”

kinds of Christian torture:

bruloir
burning alive
burning stakes
pressing

November 4, 1660 Elizabeth Brose tortured to death for Witchcraft in the castle at Gommern, Germany.

What possible reason could the U.S. government have for such Draconian penalties for cannabis? It is because Christianity has always imposed Draconian penalties for Witchcraft, including torture and the [death penalty](#). The [Controlled Substances Act](#) imposes harsher penalties for cannabis than for rape, murder, and torture because the Christian judges and Congresspersons consider Cannabis Witchcraft to be a more serious religious offense than violent crimes.

bruloirs

Bruloirs are large ovens used to kill Witches in probably the most painful manner possible. In Spain these Christian torture devices are called quemadero or brassero.



abstract painting of a bruloir

Saint Augustine claimed that burning stakes and bruloirs were justified because hell is a cruel place and cruelty that lasts for less than an hour is preferable to cruelty that lasts for eternity.

The use of bruloirs increased the efficiency of the Christian campaign of death in the exact same way as the infamous Nazi gas chambers, by allowing authorities to kill larger numbers of innocent Witches.

Christian authorities used bruloirs to kill entire families, including the children of Witches.

In 1812, Jacob and Wilhelm Grimm published a collection of fairy tales drawn from German folk sources, including such famous fairy tales as Rapunzel, Rumpelstiltskin, and Hansel and Gretel. In *Kinder und Hausmärchen* (page 68) the Brothers Grimm describe the burning of a witch in an oven:

Hu! da fing sie an zu heulen, ganz grauslich;
aber Gretel lief fort, und
die gottlose Hexe musste elendiglich verbrennen.

Which translates into English as: “Oh! How the (old witch) did howl, it was quite horrible to hear her; but Gretel ran away, and the irreligious witch had to burn miserably.”

One writer reports: “In a study on the agony of dying based on judgments of forensic pathologists (Rhyne, et.al., 1995), the most excruciating way to die is by fire, followed by pain of

death resulting from cutting the throat and by stabbing the abdomen. The bruloirs intensified the pain of death by fire by slowing down the process and increasing its psychological impact by the horror of being enclosed in a small, dark place where the temperature was steadily raising. This method of execution is salient among the cruelest methods designed to intensify the agony of death.”

pressing

Pressing was a method of torture used to attempt to get a person to confess to Witchcraft, but it often ended up killing the person. In some cases the killing would be deliberate after the confession.

A large wooden board would be placed on the Witch's chest and then heavy stones would be piled on the board, slowly increasing the pressure on the rib cage to make breathing difficult. Sometimes the weight of the stones broke the ribs, crushing the Witch to death.

September 19, 1692 Giles Corey pressed to death for Witchcraft at Salem, New England.

Elizabeth Bathory

Elizabeth Bathory is a perfect example of how Christians make up false charges and hold fake trials in order to seize the property of innocent humans, especially powerful and independent women.



portrait painted in 1585 and stolen in the 1990s

Elizabeth Bathory (Erzsébet Báthory in her native language) was born in 1560, the second child of George (Gyorgy) and Anna Báthory. Her family was one of the richest and most powerful in Transylvania. She grew up on the Báthory estate at Ecsed in Transylvania. She spent much of her adult life at the Castle Cachtrice, near the town of Vishine in the current day Slovak Republic.

Elizabeth Báthory grew up in a time when the Hapsburg Austrian armies were fighting the Ottoman Empire over much of what is present day Hungary.

In 1571 her cousin Stephen became the Prince of Transylvania and in 1581 he became the king of Poland .

In 1571 eleven-year-old Elizabeth was engaged to marry 16-year-old Count Ferencz Nadasdy. On May 8, 1575, Elizabeth married Count

Ferencz Nadasdy. Her family sided with the Protestants against the Roman Catholic Church.

After her husband's death on January 4, 1604, Elizabeth moved to Vienna. She also spent time at the family estates in Blindoc (Beckov) and Csejthe, both in modern Slovakia. Anna Darvulia, later accused of Witchcraft, started working for Elizabeth.



Nadasdy family
crest

For years Countess Báthory kept pestering King Matthias II of Hungary repay the debt of 17,408 gulden owed her late husband. She sold her castle at Theben in 1607 and her castle at Blindoc in 1610.

In 1610 Imre Megyery (Megyery the Red) presented a formal complaint before the Hungarian Parliament. An inquiry was conducted.

On December 29, 1610, the Hungarian King Matthias II ordered Lord Palatine, Elizabeth's cousin Count Cuyorgy Thurzo and governor of the province, to raid Castle Csejthe and place Elizabeth under house arrest. The official charge was Witchcraft on the false claim that Elizabeth had killed more than 600 women to drain their blood. Supposedly the Countess had bathed in the blood to keep her youthful and beautiful appearance.

A trial was conducted a few days later by Count Thurzo, an agent for the king. No testimony was presented to support any of the charges. There is no independent contemporary evidence of any kind that Elizabeth Báthory engaged in any of these activities.

A second trial was held on January 7, 1611, at Bitscse. This time a mysterious register was introduced that supposedly was a list of 650 names of victims in Elizabeth Báthory's own handwriting (even though the handwriting didn't match any of her other handwriting).

The first trial was held in Hungarian and the second trial was held in Latin. The purpose was not just conviction, but also confiscation of her extensive land holdings.

After being tortured, Elizabeth's manservant Thorko claimed to have introduced the Countess to the occult.

Supposed accomplices, all testifying after extremes of Christian torture, included János Ujvary, Thorko, a forest witch named Anna Darvula, and a witch named Dorottya Szentes. The supposed accomplices were beheaded and cremated.

Despite repeated requests to speak in her own defense, Count Thurzo refused to allow her to appear or testify at her trial, claiming that allowing her to testify in her own defense would disgrace the Báthory family name.

Transcripts of the trial were sealed on orders from King Matthias II. A hundred years later a

Jesuit priest named Laszlo Turoczy located copies of the original trial documents and gathered additional evidence.

Elizabeth Báthory was sentenced to be sealed into a room in Castle Cachtice without windows or doors and only a small opening for food and air. She died three years later on August 21, 1614.

The real reason for the trial was to steal her lands and cancel debts owed to her. After the trial, the crown seized the ample lands she owned and cancelled the debt from when the crown had borrowed large sums of money from her husband.

Even to this day, seizing property of accused Witches is a central and vital part of the DEA's Cannabis Witch Hunt.

mobs

In addition to organized religious activity, Christians often act in mobs.

1704 Janet Corset killed by a mob for Witchcraft at Pittenweem, Scotland.

death penalty

The traditional punishment for Cannabis Witchcraft is the death penalty. This is especially true for the Roman Catholic Church (RCC), the official religion of the majority of the U.S. Supreme Court.

The law against cannabis Witchcraft all goes back to early Judaism. The Jewish Torah, Christian Bible, and Islamic Koran (Quran) all specifically call for the death penalty for Witchcraft. This is the basis for all U.S. federal and state laws against cannabis Witchcraft. See [Exodus 22:18](#) and [other verses](#).

In 1579, the French government extended the death penalty to everyone who practiced any form of divination.

methods of death penalty

beheading
burning
hanging
hanged, drawn and quartered
mob
pressing

witches who died in prison

1310 Peter of Albano died in prison for Witchcraft.

August 21, 1614 [Elizabeth Báthory](#) died for Witchcraft in a sealed room in Castle Cachtice in Slovakia.

witches killed where the method wasn't recorded

December 1, 1595 Helen Calles executed for Witchcraft at Braynford, England.

October 21, 1596 Sieur de Beaumont accused of Witchcraft.

1597 Jean Belon executed in France for Witchcraft.

July 22, 1612 Mary Barber executed for Witchcraft in Northhampton, England.

July 22, 1612 Arthur Bill executed at Northhampton, England, for Witchcraft.

July 22, 1612 Agnes Browne executed at Northhampton, England, for Witchcraft.

July 22, 1612 Joan Browne executed at Northhampton, England, for Witchcraft.

1612 Jane Bulcock executed at Lancaster, England, for Witchcraft.

1612 John Bulcock executed at Lancaster, England, for Witchcraft.

March 20, 1619 Etienne Audibert condemned for Witchcraft in France.

1619 Anne Baker executed for Witchcraft in Leicester, England.

1652 Francis Adamson executed at Durham, England, for Witchcraft.

August 19, 1692 Martha Carrier executed at Salem, New England, for Witchcraft.

September 22, 1692 Martha Corey executed at Salem, New England, for Witchcraft.

1751 Anna Bayerin executed at Salzburg, Austria, for Witchcraft.

William Barton executed for Witchcraft in Scotland (year unknown).

What possible reason could the U.S. government have for such Draconian penalties for cannabis? It is because Christianity has always imposed Draconian penalties for Witchcraft, including [torture](#) and the death penalty. The [Controlled Substances Act](#) imposes harsher penalties for cannabis than for rape, murder, and torture because the Christian judges and Congresspersons consider Cannabis Witchcraft to be a more serious religious offense than violent crimes.

hanging

The traditional punishment for Cannabis Witchcraft is the death penalty. This is especially true of the Roman Catholic Church (RCC), the official religion of the majority of the U.S. Supreme Court.

A common method of carrying out the Christian death penalty against Witches was hanging.

November 18, 1441 Roger Bolingbroke was hanged, [drawn and quartered](#) at Tyburn, England, for Witchcraft.

1574 Arnold (first name unknown) hanged at Barking, England, for Witchcraft.

1616 Agnes Berrye hanged at Enfield, England, for Witchcraft.

1631 Edmund Bull hanged at Taunton, England, for Witchcraft.

1649 Matthew Bulmer hanged at Newcastle, England, for Witchcraft.

1650 Joan Allen hanged at Old Bailey, London, England, for Witchcraft.

July 1652 Anne Ashby hanged at Maidstone, England, for Witchcraft.

July 1652 Mary Browne hanged at Maidstone, England, for Witchcraft.

1653 Anne Bodenham hanged at Salisbury, England, for Witchcraft.

1655 mother Boram (first name unknown) hung at Bury St. Edmunds, England, for Witchcraft.

1655 daughter Boram (first name unknown) hung at Bury St. Edmunds, England, for Witchcraft.

March 26, 1658 Jane Brooks hanged in England for Witchcraft.

June 10, 1692 Briget Bishop hanged at Salem, New England, for Witchcraft.



the hanging of George Burroughs

August 19, 1692 George Burroughs executed at Salem, New England, for Witchcraft.

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See also: [hanged](#), [drawn and quartered](#), and [death penalty](#)

drawn and quartered

The traditional punishment for Cannabis Witchcraft is the death penalty. This is especially true of the Roman Catholic Church (RCC), the official religion of the majority of the U.S. Supreme Court.

A method of carrying out the Christian death penalty against Witches was being hanged, drawn and quartered.

This punishment was first imposed on William Maurice for piracy in 1241 under King Henry III of England.

The punishment of hanged, drawn and quartered was carried out as follows:

1. Dragged on a hurdle to the place of execution. A hurdle was a wooden frame.
2. Hanged by the neck for a short time, until almost dead.
3. Disembowelled. The genitalia of the condemned Witch would be cut off and burned before the condemned's eyes. The entrails (intestines and other soft organs) of the condemned Witch would be drawn out of the body and then burned before the condemned's eyes.
4. Quartered. Beheaded and the body divided into four parts.

Typically the five parts of the Witch (the four quarters of the body and the head) would be gibbeted (placed on public display).

The drawing and quartering carried special religious significance for the Christians of Western Europe. They believed that mutilating a human body was contrary to proper dignity and thereby punished the person beyond the grave.

One trial transcript from the Old Bailey, London, England, on July 12, 1683 states (*The Proceedings of the Old Bailey* Ref. t16830712-4):

Then Sentence was passed, as followeth, viz. That they should return to the place from whence they came, from thence be drawn to the Common place of Execution upon Hurdles, and there to be Hanged by the Necks, then cut down alive, their Privy-Members cut off, and Bowels taken out to be burnt before their Faces, their Heads to be severed from their Bodies, and their Bodies divided into four parts, to be disposed of as the King should think fit.

November 18, 1441 Roger Bolingbroke was hanged, drawn and quartered at Tyburn, England, for Witchcraft.

What possible reason could the U.S. government have for such Draconian penalties for

cannabis? It is because Chrsitianity has always imposed Draconian penalties for Witchcraft, including [torture](#) and the [death penalty](#). The [Controlled Substances Act](#) imposes harsher penatlies for cannabis than for rape, murder, and torture because the Christian judges and Congresspersons consider Cannabis Witchcraft to be a more serious religious offense than violent crimes.

See also: [death penalty](#)

beheading

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A common method of carrying out the Christian death penalty against Witches was beheading.

1500s Mark Antony Bragadini beheaded for Witchcraft in Italy.

1628 or 1629 Ancker (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Zuickel Babel beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Babel (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 husband Bannach (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 wife Bannach (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Fredrick Basser beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Batsch (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Gabriel Bebelin beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Viertel Beck beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Beck (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Christopher Berger beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 mother Bentz (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 daughter Bentz (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Beutler (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Brickmann (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Bugler (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Bursten-Binderin (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

1628 or 1629 Canzler (first name unknown) beheaded for Witchcraft at Wurzburg, Germany.

April 14, 1647 Catterina Baroni beheaded and burned for Witchcraft at Castelnovo, Italy.

April 14, 1647 Domenica Camelli beheaded and burned for Witchcraft at Castelnovo, Italy.

April 14, 1647 Lucia Caveden beheaded and burned for Witchcraft at Castelnovo, Italy.

April 14, 1647 Zinevra Cemola beheaded and burned for Witchcraft at Castelnovo, Italy.

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See also: [death penalty](#)



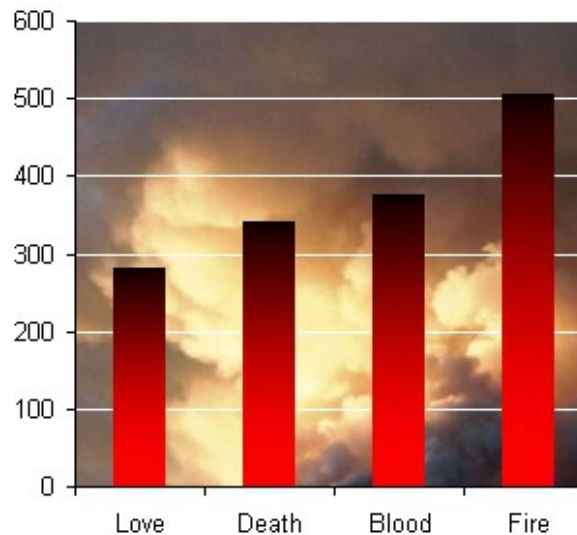
burning

While some Witches were burned to death, most commonly the dead body of the Witch was burned after execution by some other means, usually [hanging](#).



One writer reports: “In a study on the agony of dying based on judgments of forensic pathologists (Rhyne, et.al., 1995), the most excruciating way to die is by fire, followed by pain of death resulting from cutting the throat and by stabbing the abdomen. The [bruloirs](#) intensified the pain of death by fire by slowing down the process and increasing its psychological impact by the horror of being enclosed in a small, dark place where the temperature was steadily raising. This method of execution is salient among the cruelest methods designed to intensify the agony of death.”

Christians have a long standing fascination with burning people to death.



The word “fire” is one of the most frequent words in the Christian Bible. The words “fire” (506 occurrences), “blood” (375), and “death” (342) outnumber the word “love” (only 281 occurrences). the word “fire” appears 79 times in the “New Testament” and 427 times in the “Old Testament”.

John 15:6 “Unless any one abide in me he is cast out as the branch, and is dried up; and they gather them and cast them into the fire, and they are burned.” Darby Translation

John 15:6 “If a man abide not in me, he is cast forth as a branch, and is withered; and men gather them, can cast them into the fire, and they are burned.” King James Version (KJV)

John 15:6 “If anyone does not abide in Me, he is thrown away as a branch and dries up; and they gather them, and cast them into the fire and they are burned.” New

American Standard Bible (NASB)

John 15:6 “If any man dwelleth not in me, he shall be cast out as a branch, and shall wax dry; and they shall gather him, and they shall cast him into the fire, and he shall burn [and he burneth]”. Wycliffe New Testament

John 15:6 “If any ne may not remain in me, he was cast forth without as the branch, and was withered, and they gather them, and cast to fire, and they are burned;” Young’s Literal Translation

In 383 C.E., Priscillian of Avila was burned to death. Although originally accused of Manichaeism, the official reason he was executed was for Witchcraft.

In 1488, in Metz, France, an unusually cold summer (the result of the European mini-Ice Age) was blamed on Witchcraft and twenty-eight (28) persons were burned alive for Witchcraft.

In 1580 C.E., Jean Bodin wrote in *De la Démonomani des Sorciers* that “burning over a slow fire” was “not punishment enough for Witches” because it only took “about half an hour”.

In 1590, so many wooden stakes had been erected for burning Witches in Wolfenbüttel, Germany, that the site looked like a small forest.

In 1631, most of the villages and towns near Cologne, Germany, featured numerous stakes outside the walls with women bound to them and burned for Witchcraft.

In 1812, Jacob and Wilhelm Grimm published a collection of fairy tales drawn from German folk sources, including such famous fairy tales as Rapunzel, Rumpelstiltskin, and Hansel and Gretel. In *Kinder und Hausmärchen* (page 68) the Brothers Grimm describe the burning of a witch in an oven:

Hu! da fing sie an zu heulen, ganz grauslich;
aber Gretel lief fort, und
die gottlose Hexe musste elendiglich verbrennen.

Which translates into English as: “Oh! How the (old witch) did howl, it was quite horrible to hear her; but Gretel ran away, and the irreligious witch had to burn miserably.”

Numerous engravings from Medieval Europe show people being burned as Witches, their bodies surrounded by flames, their hair singed, their eyes dilated by fear. When Christians preach “love” they mean such horrible tortures as burning innocent Witches to death.

383 Priscillian of Avila burned for Witchcraft.

1275 Angela de la Barthe burned for Witchcraft at Toulouse, France.

1324 Petronilla de Meath flogged, excommunicated, and burned at the stake for Witchcraft at Kilkenny, Ireland, the first Witch murdered in Ireland.

1330 Barthelemy Andrius burned for Witchcraft at Carcassonne, France.

1330 Jean Andrius burned for Witchcraft at Carcassonne, France.

1330 Phillippe Andrius burned for Witchcraft at Carcassonne, France.

May 30, 1431 Joan d'Arc burned for Witchcraft at Rouen, France.

1546 Anne Askew burned for Witchcraft.

mid-1500s Madeline Amalaric burned for Witchcraft in France.

reign of Henry IV (December 13, 1553 - May 14, 1610) Marie Balcoin burned for Witchcraft in France.

1572 Janet Bowman burned for Witchcraft in Scotland.

1581 Anna Beuchel burned for Witchcraft at Waldsee, Germany.

1581 Appollonia Buckh burned for Witchcraft at Waldsee, Germany.

1583 Jean Bonnet burned alive for Witchcraft at Boissy-en-Ferez, France.

June 25, 1594 Agata Birenseng burned for Witchcraft at Waldsee, Germany.

December 16, 1594 Alison Balfour burned for Witchcraft at Edinburgh, Scotland.

1598 Pierre Aupetit burned for Witchcraft at Bordeaux, France.

1620 Anne Boulay burned for Witchcraft at Nancy, France.

1643 Janet Barker burned for Witchcraft in Scotland.

1643 Janet Brown burned for Witchcraft in Scotland.

1643 John Brugh burned for Witchcraft in Scotland.

April 14, 1647 Catterina Baroni beheaded and burned for Witchcraft at Castelnovo, Italy.

April 14, 1647 Domenica Camelli beheaded and burned for Witchcraft at Castelnovo, Italy.

April 14, 1647 Lucia Caveden beheaded and burned for Witchcraft at Castelnovo, Italy.

April 14, 1647 Zinevra Cemola beheaded and burned for Witchcraft at Castelnovo, Italy.

August 21, 1647 Thomas Boulle burned alive for Witchcraft at Rouen, France.

1661 Jonet Allen burned for Witchcraft in Scotland.

What possible reason could the U.S. government have for such Draconian penalties for cannabis? It is because Chrsitianity has always imposed Draconian penalties for Witchcraft, including [torture](#) and the [death penalty](#). The [Controlled Substances Act](#) imposes harsher penatlies for cannabis than for rape, murder, and torture because the Christian judges and Congresspersons consider Cannabis Witchcraft to be a more serious religious offense than violent crimes.

See also: [burning stakes](#) and [death penalty](#)

burning at the stake

Burning stakes are the primary method that Christians use for burning Witch's bodies.

Saint Augustine claimed that burning stakes and bruloirs were justified because hell is a cruel place and cruelty that lasts for less than an hour is preferable to cruelty that lasts for eternity.

In 1590, so many wooden stakes had been erected for burning Witches in Wolfenbüttel, Germany, that the site looked like a small forest.

In 1631, most of the villages and towns near Cologne, Germany, featured numerous stakes outside the walls with women bound to them and burned for Witchcraft.

burning in Hell

Christians claim that Witches are burned in the Christian Hell.

Saint Augustine claimed that burning stakes and bruloirs were justified because hell is a cruel place and cruelty that lasts for less than an hour is preferable to cruelty that lasts for eternity.

Saint Augustine wrote in his 69th address “*Ad Fratres in Eremitate Sermo LXIX*” a description of Hell in which Satan seizes a woman’s damned soul and commands his fellow devils to:

“pierce her eyes with forks as she enjoyed looking at unclean things, pierce her mouth as she used them for blasphemy, pierce her heart, as she did not harbor piety, compassion, clemency, and forgiveness there, pierce her hands with the heavy fork forged in Hell since she reached with them at things unclean and did not use them to distribute alms and help her neighbors, use the feiry forks to pierce her legs she used to dance and meet her lovers.”

According to Saint Augustine, after the devils performed these tasks, the devils spread their black wings and transported the stabbed woman’s soul to hell. When the gates of Hell open:

“out steps a hideous, horrible dragon, always ready to devour souls. The dragon inserts the soul into his mouth, full of stench. After chewing and digesting the soul, the ddragon vomits the soul into a fiery lake, where millions of other sinful souls wait for their trial by our Lord.”

Saint Augustine continued with a description of women fried for eternity in oil and men burned in their own sperm.

sealed records

It is common for Christians and other Witch Hunters to seal the records of their trials and executions.

To this day the Roman Catholic Church refuses to open its archives of Witchcraft trials, forbidding acces even to academic scholars.

The Roman Catholic church does this to make it impossible to accurately tabulate the number of victims of Witchcraft Trials. Estimates run into millions more than the number of Jews lost in the Nazi Christian Holocaust.

In 1611 King Matthias II of Hungary ordered the transcripts of the trial of [Elizabeth Bathory](#) to prevent embarassment to the crown.

While few Christian theologians and Bible scholars deny the existence of Witch Trials, they use the lack of access to church records to try to minimize the extent of the persecution and reduce the number of reported victims.

anarchy

anarchy

Notes on anarchy.

Basic Principles of Anarchism

Text is from [The Anarchist Library](#)

Title: Basic Principles of Anarchism

Author: [Morpheus](#)

Topics: [introductory](#), [principles](#)

Date: 25th June 2003

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https://web.archive.org/web/20070303054259fw_/http://question-everything.mahost.org/Socio-Politics/BasicAnarchy.html

Common Myths About Anarchism:

Anarchists advocate complete chaos

This is a complete myth with no basis in reality. Anarchists do not advocate chaos and anarchy does not mean chaos. Similar slander used to be said about the ideas of democracy and republics. In places where a Monarchy was thought necessary the idea of elected governments was often equated with complete chaos. This association is the result of slander by the powerful (the state, corporations, etc.) that control the media and is, unfortunately, not a surprise. Since anarchists seek to overthrow them it is not surprising that they would slander anarchism with all sorts of absurd nonsense.

Anarchists believe in mindless violence

Another common stereotype is that of the mad bomb-throwing anarchist who advocates carnage and destruction for the sake of it. This too is a myth. Anarchists do not normally go around throwing bombs at everyone nor do we consider beating up old ladies a virtue. It is true that there have been anarchists who have used violence to advance their cause but this is true of every political philosophy. Republicans and Democrats have used much more violence throughout history than anarchists, yet they are never demonized as crazed bomb throwers. Indeed, the state is not only inherently violent but the most violent organization in human history. It uses violence on a systemic level (in the form of police & militaries) and is responsible for numerous genocides. The state is vastly more violent than the most violent of anarchists.

Anarchists, by definition, are opposed to organization

The vast majority of anarchists are not opposed to organization. What anarchists are opposed to is hierarchical organization — organizations in which one group of people tells the other members what to do. Instead anarchists advocate organization without authority, where all members have an equal say in group decisions.

What Anarchism Really Stands For

Anarchy comes from the Greek and literally means “no rulers.” Anarchists are anti-authoritarians who seek to abolish domination. It is important to differentiate between different two types of authority: legitimate (or rational) authority and illegitimate (or irrational) authority. In other words, there’s a difference between being an authority and having authority. Being an authority means that a person is recognized as competent for any particular task based on her or his knowledge and individual skills. It is socially acknowledged expertise. Legitimate authorities are experts who are particularly knowledgeable, skillful or wise in any particular area. It may be in our best interests to follow their recommendations, but they have no power to force us to do so, nor should they. Legitimate authority is this kind of authority, the authority of an expert.

Having authority is a social relationship based on status and power derived from a hierarchical position within a group. It means dividing society/the group into the order givers and the order takers. The order givers, the authorities, tell the order takers what to do and they must obey. This is illegitimate authority. A boss, for example, is an illegitimate authority because employees must obey his orders. When something is described as “authoritarian” it usually means that it uses illegitimate authority.

Hierarchy is essentially institutionalized authority. It is a pyramidally structured organization consisting of a series of grades, ranks or offices of increasing power, prestige, and/or remuneration. Those with lower ranks must obey those with higher ranks. Hierarchies maintain control by coercion — the threat of negative sanctions (physical, economic, social, etc.) against those who don’t obey. Hierarchical organizations are, by definition, organizations that are run by elites. Those on the top, the elite, have more power than those on the bottom. Hierarchical authority is the authority that is inherent in any hierarchy. This is the same thing as illegitimate (or irrational) authority — that is, relations of command and obedience. Another name for this is domination.

Anarchism is extreme skepticism of authority. The basic idea is to abolish domination in favor of a society based on voluntary cooperation. As the anarchist Noam Chomsky said:

“I think it only makes sense to seek out and identify structures of authority, hierarchy, and domination in every aspect of life, and to challenge them; unless a justification for them can be given, they are illegitimate, and should be dismantled, to increase the scope of human freedom. That includes political power, ownership and management, relations among men and women, parents and children, our control over the fate of future generations (the basic moral imperative behind the environmental movement, in my view), and much else. Naturally this means a challenge to the huge institutions of coercion and control: the state, the unaccountable private tyrannies that control most of the domestic and international economy, and so on. But not only these. That is what I have always understood to be the essence of anarchism: the conviction that the burden of proof has to be placed on authority, and that it should be dismantled if that burden cannot be met. Sometimes the burden can be met. If I’m taking a walk

with my grandchildren and they dart out into a busy street, I will use not only authority but also physical coercion to stop them. The act should be challenged, but I think it can readily meet the challenge. And there are other cases; life is a complex affair, we understand very little about humans and society, and grand pronouncements are generally more a source of harm than of benefit. But the perspective is a valid one, I think, and can lead us quite a long way.” ^[1]

Following Chomsky’s logic, anarchists argue that hierarchy, bodies of people having authority over others, is unjustified and should be abolished. Some anarchists take this a step further and oppose other forms of authority; a few argue that “legitimate authority” (expertise) is also unjustified, but most do not. Unless a good justification can be given for any form of authority it should be abolished. In the case of hierarchical authority anarchists believe there is no valid justification for it; all major hierarchical institutions should be abolished. Instead of dividing society into a hierarchy of order givers and order takers everyone should have control over their own life and an equal say in group decisions.

What Anarchists Oppose

Hierarchy

As explained above, anarchists are opposed to domination. Relations of command and obedience are not only unnecessary but also inherently detrimental to humanity. Everyone should have control of their own life instead of being bossed around by others.

Capitalism

Capitalism is an economic system based upon wage labor. Under capitalism a small group of people, the capitalist class, owns the means of production (land, factories, mines, etc.) and the working class (the majority of the population) must sell their labor to the capitalist class in order to survive. If the workers do not sell their labor they will starve because they do not have access to the means of production — the capitalist class monopolizes them. The ownership of the means of production by the capitalists does not have to be direct but can be through an organization they control, such as corporations. Anarchists are also opposed to all other class systems but focus on capitalism because it is the dominant economic system today. Class is economic hierarchy. Other class systems include feudalism, soviet-style “socialism” (which many anarchists consider to be a form of state-capitalism) and slavery.

The State

Sociologists define the state (also called government) as an organization with a monopoly (or near monopoly) on the legitimate use of violence. It is a centralized rule making body with a pyramidal, hierarchical structure that uses its monopoly of force to boss around all those within its territory. It maintains various armed bodies of people (police, military) and coercive institutions (courts, prisons) with which it coerces the population into obeying its dictates.

Because of its hierarchical structure and monopoly of force the state always acts to enforce the rule of a small elite. It exists not to “enforce order” or anything like that but to enforce the will of the ruling class. Anarchists are opposed to all states, including:

Representative “Democracy”

Elected governments are run by and for a small elite, just like all other states. Elected representatives are not tied in any substantial way to particular policies, regardless of the preferences of the electorate. Ordinary people have no real control over the decisions of the politicians — once elected they can make what ever decisions they want regardless of what most people want. Representatives are separated from the population but exposed to powerful pressure groups including state bureaucracies, corporations, lobbyists and political party power brokers.

“Socialist” States

Attempts to overthrow the capitalist class and implement a socialist “workers’ state” inevitably lead to the replacement of the old ruling class with a new, bureaucratic ruling class that exploits the working class just as the old ruling class did. There is no effective way for the working class as a whole to control the state. It has a monopoly of force and will simply use that monopoly to establish itself as a new ruling class. Decision making power lies with the leaders, not with the masses of ordinary workers. When the politburo or parliament or council of people’s commissars or other leaders are making the decisions the workers are not.

Patriarchy

Patriarchy is male domination — a social relation in which men have power over women; gender hierarchy. In every society men and women are expected to behave in certain ways and if they do not they are subjected to various forms of coercion ranging from being made fun of to violence to exile. How a man or woman is expected to behave in a given society is called their gender. This is different from sex, which refers to the biological characteristics that distinguish male from female. Gender varies greatly from society to society. Under patriarchy gender is constructed so that, on average, men have more power than women. The results of this are quite negative — in addition to diminishing women’s freedom it also results in sexual harassment, reduced opportunities for women, rape and various other forms of sexual violence. Anarchists advocate equality of the sexes.

Heterosexism

Heterosexism is a natural outcome of the form of patriarchy that exists in the west and many other parts of the world. Gender in most modern patriarchal societies is constructed so that heterosexual behavior is the norm. Homosexuals deviate from how men and women are expected to behave and so are subjected to various forms of coercion as a result. There is thus a hierarchy between hetero and homosexuals. Anarchists are opposed to any sort of oppression on the basis of one’s sexuality.

White Supremacy

Race is a social construction. It divides a population into a hierarchical set of “races” with those on top — the white race — having privileges and power over those in other “lower” races. Race is hereditary. Usually people are assigned to their race based on some meaningless characteristic, such as skin color. Race is not at all biological but is a pure social construction. Looking at different societies that have different constructions of race easily proves this. What Americans call blacks are actually broken into several different races in most Latin American countries (blacks, mulattos, etc). In the US Irish, Italians and East Europeans were considered non-white a hundred years ago but today are considered whites. In Rwanda two groups most Americans would consider black, Hutus and Tutsis, are regarded as two different races. White supremacy first arose with the Atlantic Slave Trade as a way of justifying it and of splitting the working class to insure that poor whites did not ally with rebellious blacks.

Imperialism

Imperialism is a social relationship in which the rulers of one country dominate the population of another country or territory. At present the United States is the main imperialist nation, dominating most other countries in the world. Past imperialist powers have included the Soviet Union, Rome, Germany, England and the Aztecs.

Basic Principles of Anarchism

Anti-Authoritarianism

Anarchists are extremely skeptical about the need for any kind of authority. At minimum all anarchists believe that hierarchy should be abolished and some take this further and oppose other forms of authority. Instead of hierarchy, everyone should have control over their own life and an equal say in group decisions.

Free Association

Everyone should be allowed to associate freely with those they choose and to disassociate themselves when they choose. Individuals should not be forced into social relations against their will. Society should be based upon free agreement, rather than coercion.

Mutual Aid

Instead of attempting to dominate each other social relations should be based on solidarity and voluntary cooperation. When individuals come together to help each other they can accomplish more than when they work against each other.

Freedom

Freedom means the ability to control one's own life instead of being controlled by others, as is the case with hierarchy. This is sometimes called liberty or autonomy. Controlling other people's lives is not freedom but a restriction of freedom.

Self-Management

In groups decisions should be made in a manner so that everyone has an equal say. People should govern themselves, rather than dividing people into some who give orders and some who obey as in hierarchical organizations.

Radical Egalitarianism

Anarchists believe in an egalitarian society. This does not mean some totalitarian society where everyone is identical or lives identical lives. It does not mean denying individual diversity or uniqueness. Rather anarchists believe in equality of both wealth and power — a natural consequence of the abolition of hierarchy.

Feminism

Anarchists favor social, economic and political equality for men and women. The domination of men over women should be abolished and all people given control of their own lives.

What An Anarchist Society Would Look Like

There have been many different visions of what an anarchist society would look like. Any vision that abolishes the things anarchists are opposed to and is consistent with the earlier stated principles of anarchism is compatible with anarchy. There are, however, many institutions that have been proposed by anarchists to run a non-hierarchical society. Most of these are not based on idle speculation but by looking at how actually existing anarchist societies have worked. Some of them are:

Popular Assemblies

Also called general assemblies or mass assemblies. In any organization people can come together to meet and discuss whatever common problems or activities they face. At these assemblies everyone should have an equal opportunity to participate in both the discussion/debate and the final decisions. These can be formed in workplaces where they would take over the running of all workplaces. Worker assemblies would then meet regularly to plan production, divvy up the tasks that need to be accomplished, etc. They can be formed in each neighborhood in order to deal with whatever particular issues confront that neighborhood and organize to deal with them. These are based on free association so whenever a group of people wants to get together to accomplish some goal they can simply form a general assembly to organize it. Free association also means that no one would have to participate in an assembly if

they did not want to. Such assemblies can be formed to organize around anything — not only around workplace and neighborhood issues but potentially also universities, clubs, space exploration, etc. Worker assemblies, neighborhood assemblies, university assemblies, community assemblies and the like can all be formed to run society without hierarchy, based on self-management.

Councils

The different assemblies can coordinate their activities through the use of a council system. This is done by each assembly assigning a contact person(s) (sometimes called a spoke or delegate) to meet with other contact people from other assemblies which they want to coordinate things with. The meeting of contact people is called a council or spokescouncil. Position of contact person should rotate frequently. Each contact person is mandated, meaning that they are instructed by the assembly that they come from on how to deal with any issue. The contact people would be given binding instructions, committing them to a framework of policies, developed by their assembly, within which they would have to act. If at any time they violate their mandate their assembly would instantly recall them and their decisions revoked. Decision making power stays in the assemblies; contact people simply convey and implement those positions. Contact people do not have any authority or special privileges. Councils are organized from the bottom up, with control staying in the assemblies. They are not hierarchical organizations but simply coordinate the activities of the assemblies without authority. Instead of hierarchy there are decentralized confederations and networks. This differs from representative institutions in that decision making power stays in the assemblies whereas representatives can make whatever decisions they want and have authority over others. These councils can be formed to coordinate the activities of assemblies on whatever level needed. Worker councils can coordinate the activities of the worker assemblies; neighborhood councils can coordinate the activities of different neighborhood assemblies, etc. They can also do this on a regional scale — forming regional worker councils, etc — and those regional confederations can use the same method to coordinate with each other. In all cases decision making power stays with the assemblies upon which the councils are based — the assemblies would be the core of any organization.

Decision Making Processes

Any decision making process in which everyone has control over their own life and all members have an equal say, rather than dividing people into order givers and order takers, is theoretically compatible with anarchism. Although there are many different ways in which this can be done, there are two main methods of non-hierarchical decision making which are advocated by most anarchists:

Consensus

In consensus everyone in the group must agree to a decision before it can be put into action. All contributions are valued and participation is encouraged. Any member can block consensus,

stopping a decision they strongly object to. Members may also “stand aside,” allowing a decision they do not like to be made without blocking or supporting it.

Direct Democracy

Decisions would be made by directly voting on the options — the option with a majority of votes is implemented. Anarchists who advocate direct democracy do not believe in a mechanical process whereby the majority just votes away the minority and ignores them. It is intended to be a dynamic discussion process where different people listen to each other and exchange ideas. Direct Democracy is combined with free association as well — meaning that anyone who is out-voted does not absolutely have to abide by the decision. They can simply leave the group.

These decision making processes would be used in the popular assemblies, councils, etc. There are many variations on them and it is also possible to synthesize consensus and direct democracy. Some groups could use direct democracy but require the majority be of a certain size (such as 2/3rds or 3/4ths) instead of a simple majority. Another variation is to attempt to achieve the largest majority possible.

Economics

There have been many different economic systems envisioned by anarchists. These different visions are not necessarily incompatible with each other and could probably co-exist within the same society. The main ones are:

Mutualism

In mutualism people would be either self-employed or part of a worker-controlled cooperative (individual cooperatives would be run by worker assemblies as described above). They would produce goods and trade them on a market. Although mutualism uses markets to coordinate production it is not capitalist because wage labor would be abolished. No one would sell their labor to others but would instead work in cooperatives or for themselves.

Collectivism

In Collectivism markets would be abolished. Instead of using markets to coordinate production they would set up workers councils, as described above, to coordinate production. Each workplace would be run by its own worker assembly and each assembly would federate with other workplace assemblies in the area, forming a local workers council. The workers councils would federate with each other (forming more councils) as needed on many levels. Money would be kept and people paid on the basis of how much they work. Most collectivists believe that collectivism would eventually evolve into a gift economy.

Participatory Economics

Also called Parecon. This is similar to collectivism; the biggest difference is that there are consumer assemblies in addition to worker assemblies. The underlying values parecon seeks to implement are equity, solidarity, diversity, and participatory self management. The main institutions to attain these ends are council self management, balanced job complexes, remuneration according to effort and sacrifice, and participatory planning. Consumers and workers directly democratically and cooperatively negotiate their production and consumption on an individual basis and via worker and consumer councils and federations of councils. Balanced job complexes share quality of work and empowering work equitably throughout the workplace and the entire economy. Workers are remunerated for effort and sacrifice, so in tandem with balanced job complexes consumption bundles are roughly equal, with minor discrepancies due to people's chosen working hours and intensity.

Gift Economy

Also called anarcho-communism or libertarian communism. A gift economy would abolish money and trading all together. Production and distribution would be done purely on the basis of need through a confederation of free communes. The economy would be organized along the lines of "from each according to ability, to each according to need." The "communism" in anarcho-communism has nothing to do with the countries which some erroneously call "Communist" (USSR, China, etc.). None of those countries actually claimed to be communist; they claimed to be in a transition to communism. Anarcho-communists opposed these dictatorships from the very beginning and have participated in many rebellions against them. Anarcho-communists would do away with money, central planning and the state — all of which were present in the USSR, China, etc.

Primitivism

Primitivists would abolish industry, civilization and most forms of technology. Instead anarcho-primitivists advocate a low-tech green society. This would be either an agrarian or hunter-gatherer society. Primitivists are split on the question of agriculture: some want to do away with it all together and others would keep some forms of primitive agriculture.

How Might An Anarchist Society Be Created

Self-Liberation

Anarchists believe in self-liberation. The liberation of the oppressed can only come about through the actions of the oppressed themselves (either individually or collectively). Those on the bottom of society have to rebel against those on the top and refuse to obey them. People cannot be forced to be free. Anarchy cannot be created by some vanguard seizing power but only by the self-liberation of the oppressed.

Direct Action

Direct action means that instead of relying on someone else to act for you (such as a politician) act for yourself. It is any action which people themselves decide upon and organize themselves that is based on their own collective strength and does not rely on getting intermediates to act for them. Examples of direct action include strikes, boycotts, sabotage, insurrections and civil disobedience. Direct action can also be liberatory because it puts power in the hands of ordinary people; instead of relying on someone else to do something we do it ourselves.

Building the New Society within the Shell of the Old

The means you use will greatly affect the ends you get. As such anarchists organize along the same principles in which we advocate organizing society: non-hierarchically. For this reason anarchist organizations are often based around general assemblies and spokescouncils. Many anarchists see the initial framework of anarchy being created within the old society, before capitalism and the state are abolished. Popular organs of self-management would be formed before the overthrow of the old society. This includes neighborhood assemblies, workers' councils, syndicalist unions and the like. These non-hierarchical organizations would fight against the institutions of the old society (government, capitalism, patriarchy, etc.) and as the old society is destroyed they take over the running of society.

Different Kinds of Anarchists

Differences of Focus

In addition to differences over what an anarchist society should look like, different anarchists also focus more on different issues. Anarcha-Feminists focus on women's liberation and the struggle against patriarchy. Eco-Anarchists focus on ecology and the destruction of the environment. Anarcho-syndicalists focus on unions and the labor movement. The divisions between the various kinds of anarchists overlap and are not absolute. Most different kinds of anarchists are willing to co-exist and work together.

Evolution vs. Revolution

The majority of anarchists are revolutionaries who believe that an anarchist society will come about as the result of a social revolution. The government would be overthrown and abolished, the means of production expropriated and placed under self-management and a rapid transition to anarchy made. Others believe in an evolutionary approach — that anarchy will come about as a result of a lengthy centuries-long evolution.

Violence

Some anarchists are also pacifists who believe all forms of violence are immoral. True pacifism logically implies anarchism. The state is inherently violent and the most violent organization in human history; other forms of hierarchy are usually violent as well. The majority

of anarchists are not pacifists, however. Although non-pacifist anarchists do not glorify violence most believe that the use of violence in self-defense and/or to overthrow hierarchy is justified.

Religion and Philosophy

Anarchists come from many different religions and philosophical backgrounds — from atheistic materialism to postmodernism to egoism to Taoism to Christianity and everything in between. Although most anarchists are atheists/agnostics there are religious anarchists including Pagans, Christians, Muslims and Jews. Any religion or philosophy is theoretically compatible with anarchism so long as it does not advocate things (such as a god-king) that contradict the basic ideas above.

Anarchy In Action

Everyday Life

There are many examples of anarchist principles in real life. Some of them come from the daily lives of ordinary people living in contemporary hierarchical societies. One example is “a group of friends going on a camping trip. They plan their trip, and each person brings useful skills and tools to share. They work together to set up tents, fish, cook, clean up, with no one in a position of authority over anyone else. The group organizes itself, chores are done, and everyone passes the time as they please, alone or in groups with others. People discuss their concerns and possible solutions are proposed. No one is bound to go along with the group, but choosing to spend time together implies a willingness to at least try to work out constructive solutions to the problems and frictions that will inevitably arise. If no resolution is possible, the dissenting individuals can form another grouping or leave without fear of persecution by the rest of the group.” ^[2] Similar non-hierarchical forms of organization happen all the time even in the most authoritarian of societies. They're informal and small scale but it is an example of anarchy in action. In an anarchist society non-hierarchical forms of organization would be the dominant form of organization.

Primitivist Societies

There have been many examples of anarchist societies throughout history; most of them have been agrarian or hunter-gatherer societies. The immense majority of human history was lived in primitive anarchy. The human race has been around between 50,000 and 500,000 years (depending on how you define human and what estimates you use). The first states came around about 7,000 years ago in Mesopotamia. For a long time after states and classes were created they were limited to certain parts of the world while much of the globe lived in anarchy. It is only in the last couple of centuries that states came to rule the entire world, primarily as a result of conquest. Although far from perfect, most primitivist societies were not the Hobbesian hellholes they are often portrayed as (see *Stone Age Economics* by Marshall Sahlins). Well known indigenous anarcho-primitivist societies include the !Kung and the Igbo (prior to western imperialism).

Ukrainian Revolution

In early 1918 the new Bolshevik government of Russia made peace with Germany and agreed to give up the Ukraine, formerly part of the Russian Empire, to Germany. The inhabitants of the Ukraine had little say in this and were opposed to it. A rebellion against German rule erupted which turned into an anarchist revolution. The revolution was rooted primarily among peasants although it included cities at its height. Village assemblies and communes were formed throughout much of the Ukraine. When it included cities factories were taken over by the workers. They formed decentralized democratic militias, which fought guerilla warfare against numerous statist armies that invaded the Ukraine during this time period. The Anarcho-Communist Nestor Makhno played a major role in organizing these militias. They successfully defeated the Germans, Austrians, Ukrainian Nationalists, and two white invasions led by General Denikin and then General Wrangel (the Whites were ultra-reactionary armies fighting the Bolsheviks in Russia). In 1921 the Bolsheviks, having recently won the civil war against the Whites, invaded the Ukraine. They used their vastly superior resources to conquer the Ukraine and implement a reign of terror.

Spanish Revolution

On July 19, 1936 General Francisco Franco launched a Fascist coup against the Spanish Republic. In response the CNT, an anarcho-syndicalist union, and the UGT, a union affiliation with the Spanish Socialist Party, called a general strike. The Republic refused to release arms to the workers so they broke into the barracks and distributed arms to the people. They fought and defeated the Fascist coup in two-thirds of Spain. The state was effectively destroyed; the military was in rebellion and the police forces had dissolved during the fighting. The workers and peasants proceeded to take over the land and factories. Collectives were formed throughout anti-fascist Spain. Collectivism was the main economic system, although a few villages abolished money and implemented anarcho-communism. There were also elements of mutualism implemented in some places. Decentralized militias were formed to fight against the Fascists. After three years of civil war the fascists won. The victory of fascism was due not only to their superior arms and assistance from Hitler & Mussolini but also strategic errors made by the anarcho-syndicalists and backstabbing by Marxist and Republican “allies” in the fight against fascism.

Common Questions and Objections

What Would You Replace The State With?

Nothing. Would you replace a tumor?

What About Human Nature

If human nature is bad then hierarchy should be abolished because those on the top will

inevitably abuse their power. If human nature is good then there is no need for hierarchy because people will do good things without being dominated by others. Either way, we should have anarchy. If people are too evil to rule themselves then they are far too evil to rule other people. The immense majority of human history has been lived in hunter-gatherer societies, a form of primitivist anarchy. If human nature favors any particular social system it favors hunter-gatherer anarchy because that is what the majority of human history has been lived in. Given the immense diversity of social systems humans have created over the eons it is unlikely that human nature, if it even exists, plays a great role in determining social structure.

What Would Happen To Former Politicians and Capitalists?

Individual politicians and members of the capitalist class from the old society would be allowed to become part of the new society as equals. They would lose all their former powers and privileges and live alongside everyone else as equals. Those who do not want to are free to become hermits or leave. Anyone who does not want to participate in the various collective organizations would be free to leave and would be given access to a portion of the means of production so that they could support themselves on their own. During the Spanish Revolution “if you didn’t want to join the collective you were given some land but only as much as you could work yourself. You were not allowed to employ” wage-laborers.” ^[3] They could attempt to set up alternative systems so long as they are completely voluntary. They could attempt to reestablish capitalism (or some other form of oppression) so long as it was completely non-violent and voluntary but doing so would be extremely difficult because few people would volunteer to be poor and work in their sweatshops. Few people will volunteer to be oppressed, especially in an anarchist society where hierarchy would be viewed quite negatively. Reestablishing some form of domination through purely voluntary and non-violent means would therefore be almost impossible.

How Could An Anarchist Society Defend Itself From Foreign Aggression and Statist Armies?

The same tactics used to overthrow hierarchy, direct action, could be used against counter-revolutionary armies. This includes, but is not limited to, civil disobedience, strikes, insurrections, street fighting, etc. If necessary the population could be armed and a decentralized network of democratic militias formed to wage guerilla warfare against the statist forces. This can be done against both foreign invaders (if one part of the world is in anarchy and the other is authoritarian) and against domestic counter-revolutionaries who attempt to use violence to force everyone back into an authoritarian society.

How Would Anarchists Deal With anti-Social Crimes?

Crime is the result of hierarchy; the abolition of hierarchy will cause it to disappear. 95% of crime is caused by patriarchy, private property and capitalism (stealing, etc.); its abolition will result in the end of 95% of crime. What little is left over could be better dealt with by the community than by any police force. Many historical pre-capitalist societies had little or no crime; a few weeks after the Spanish Revolution began crime plummeted. The state has proven

completely incapable of combating crime — it has been trying to prevent crime for years yet has been a complete failure. At best it merely punishes people after the fact. “Prisons fail to improve or reform anyone. Local people aware of each others’ circumstances would be able to apply more suitable solutions, in keeping with the needs of the victim and the offender. The present penal system, on the other hand, *creates* criminal behaviour. Long term prisoners are often rendered incapable of surviving outside an institution that makes all their decisions for them. How is locking people up with others of an anti-social turn of mind ... supposed to develop responsibility and reasonable behaviour? Of course it does just the opposite. The majority of prisoners re-offend.”^[4] The state and capitalism are far worse then crime; they kill and rob on a scale far greater then any ordinary criminal. Under the present system petty criminals go to prison but the big criminals run the country.

But We Need Coordination and Administration

It is possible to coordinate activities without hierarchy. Any group of people can get together and hold a general assembly where they can divvy up the tasks they need to do and decide who will do what. If needed they can assign one or more people to act as coordinators. Such coordinators would simply implement the plans developed by the general assembly and would have no authority themselves. In the Ukrainian and Spanish Revolutions when workers took over factories the worker assemblies often created factory committees that performed administrative and coordination tasks. Decision making power stayed with the worker assemblies, the factory committees simply implemented what the workers decided in their assemblies. Coordination between multiple assemblies can be done through the council system.

^[1] “Chomsky on Anarchism, Marxism and Hope for the Future” Interview in Red & Black Magazine 1995

^[2] “Consent or Coercion” by Affinity Group of Evolutionary Anarchists

^[3] “The Spanish Civil War: Anarchism In Action” by Eddie Conlon, Chapter 2

^[4] “Everything You Ever Wanted To Know About Anarchy” by Anarchist Media Group, Cardiff (UK)

Text is from [The Anarchist Library](#)

cooking on a budget

cooking on a budget

I was asked if I could provide recipes for poor people, especially those limited to a microwave oven.

So, I will start with a few key microwave recipes that use some of the lowest cost foods generally available.

The problem of how to get a healthy diet on a budget goes very deep. The United States has the strange combination of a majority of its people being obese and a majority of its people being undernourished.

This is a result of several factors, all of which eventually trace back to capitalist profits.

The poorer you are, the more difficult it will be for you to take actions needed to have a healthy diet.

Even worse, there is psychological manipulation of the message about healthy eating combined with chemical modification of food to make the lowest health, highest profit foods more addictive.

You will often hear people emotionally defending horrible eating habits as a matter of their core freedom and human rights.

I will go over such things as how to grow and cook your own food, how to cook for beginners, shopping hints, cooking tips, nutrition, gardening, and other food related topics.

I will also go over the Standard American Diet (SAD), how it came into being (short answer: capitalism and the profit motive) and how to painlessly as possible move from the SAD to a healthy primarily vegetarian diet at your own pace.

Some quick hints on topics to come: chicken eggs became a main part of SAD because of the extinction of the passenger pigeon and bacon became a main part of the SAD because of PR expert Edward Bernays,

But first, the promised microwave meals.

potato

“Potatoes are so good. I didn’t include them because my grocery store sells them after they’ve been laying around for so long they’re basically not shelf stable anymore (ie just about to turn green) but if that isn’t a problem or you have somewhere to grow them, they’re great.” —[Soup](#)

“I think freeze dried potatoes would just be those boxes of instant mashed potatoes you can get at a grocery store. Those are a good option, especially to have around in bulk because you can use a few tablespoons to bulk up a soup or stew.” —[Soup](#)

microwave



image by Christos Giakkas from Pixabay

You can make a “baked” potato in a microwave oven.

Scrub the potato.

Dry the potato.

Pierce the potato all over with a fork. This allows the steam to escape and keeps the potato from exploding all over the inside of your microwave oven.

Cooking times for average to large size potatoes (around 10 ounces). For smaller potatoes: one minute less. For larger potatoes: one minute more.

One potato: 3-4 minutes per side

Two potatoes: 4-5 minutes per side

Three potato: 5-6 minutes per side

If you cook more than one potato at a time, make sure they don't touch each other.

Microwave the stated per side time, then flip the potato over and microwave the other side for the stated time.

If a portion (or all) of the potato becomes over-cooked, it will lose its moisture and become unpleasantly hard. If your microwave oven doesn't revolve, stop a few times to rotate the potato with a fork or tongs.

Test for doneness by piercing with a knife. The potato should be tender, but not mushy.

Be careful about overcooking. Once the moisture is evaporated, the potato becomes hard in the microwave and is no longer a pleasant meal. If not quite cooked, cook some more in small increments, such as a minute or half a minute at a time.

Remove from the microwave and let stand for about a minute. If the potato is still uncooked, microwave in one minute increments until it is done.

Some popular baked potato toppings include: butter, cheese, sour cream, bacon, chili, broccoli and cheese, or taco filling and nacho sauce.

You can combine microwave and oven baking. Use a shorter time in the microwave to get a lot of the cooking done, then finish up in a pre-heated oven to get a crispy skin.

Potatoes and beans are low cost and reasonably healthy.

beans

“There are 6 servings in a lb of dry beans. Dry beans have to be soaked for at least 5 hours before cooking, esp if they're kidney beans, or you can get sick.” —[Soup](#)

microwave

You can microwave dried beans.

Place in a microwave safe 5-quart casserole dish. For each pound of beans, add six cups of

water, plus any seasonings.

Microwave at full power for 8-10 minutes until boiling.

Cover with plastic wrap or a casserole lid and let stand for one hour.

Stir several times and add hot water as needed to keep the beans covered.

Cook again at full power for 8-10 minutes until boiling, then reduce power to 50% and cook for another 15-20 minutes until tender.

Alternatively, you can soak the beans overnight and then cook at full power for 15-20 minutes until tender.

You can melt cheese on top of the cooked beans.

You can save money by coordinating with neighbors to buy beans and rice in bulk.

rice

“Stock up on rice NOW! Grain prices will be through the roof come harvest season, as there will be crop failures worldwide. Same goes for wheat. Buy unprocessed wheat if you can find it, it keeps for years if stored in a sealed container.” —[Jeff Larsen](#)

“They brought us here as slaves based on our skills & trades: including growing rice.

“Rice plantations shaped and reshaped the lowcountry geography and economy, making Charleston one of the richest cities in the world, but it was a wealth built primarily on slave labor.” ” —[Kayla Love](#)

“From the crucible of slavery, lowcountry blacks and their descendants, known as the Gullah Geechee people, fashioned a unique creole culture. They created the only English-based creole language in North America and a distinctive cuisine based on rice.” ” —[Kayla Love](#)

“There are 16 servings in a lb of rice.” —[Soup](#)

microwave

You can microwave rice.

Place 1-1/2 cups of raw rice in a microwave safe bowl with a lid.

Rinse in water, then drain out the water.

Add 2-1/4 cups water.

Too much water makes soggy rice and too little water makes dry rice.

Microwave on full power for five minutes.

Then microwave at 50% power for 15 minutes.

Let rest for five minutes.

You will end up with about 3 cups of cooked rice.

Almost any grain with almost any legume is a composite protein.

You can save money by coordinating with neighbors to buy beans and rice in bulk.

Add fresh vegetables for additional nutrients and more interesting flavor.

Batch cooking rice is a way to save both time and money.

Cooked rice can be stored in the refrigerator for up to six days.

You can freeze cooked rice.

Place 1-2 cup portions in freezer bags. Write on the bag with a permanent marker how much rice is in each bag and the date the rice was cooked. Before the bags are frozen, flatten them for easier stacking.

To reheat, place frozen rice and 1-2 tablespoons water or broth into microwave safe container, cover, and microwave for 2 minutes.

You can add from the following spice lists to make the rice more interesting. You can add the spices when originally cooking the rice or when reheating from frozen.

Cajun: cayenne pepper, paprika, or garlic powder

Caribbean: allspice, nutmeg, or cloves

Indian: curry powder, ginger, or turmeric

Mediterranean: cardamon, basil, or oregano

Mexican: coriander, cumin, or chili powder

Savory: thyme, rosemary, or dill

tortilla

Tortillas are cheap and easy to make. When you make them yourself, yours will taste better than store bought. But you aren't actually saving money.

Because the process and ingredients are so simple, their costs are low. They also have the advantage of the cost savings of buying in bulk.

If your goal is to save money, go ahead and purchase store bought tortillas. It will be around the same price as homemade, possibly even cheaper.

The reason to make your own tortillas is either because you enjoy making them or because you prefer the taste of homemade.

tortilla soup

This recipe is fairly low cost and is fast and quick to make in the microwave.

microwave

In a microwave safe bowl, mix 1/2 can of fire roasted tomatoes, 1/2 cup salsa, and 1/2 cup of water, with 1/4 teaspoon chili powder, 1/4 teaspoon cumin, and a pinch of cayenne pepper. Stir together to create the base of the soup.

Add 1/2 cup of frozen corn (after it has thawed), and 1/2 can of black beans.

Thinly slice one corn tortilla. and then cut the slices into thirds or fourths.

Stir and mix the soup.

Cook in the microwave for two to three minutes, depending on how thick or thin you want your tortilla soup.

Top it with chopped cilantro, fresh squeezed lime, diced avocado, and either nutritional yeast or cheese.

black beans and Mexican rice

This recipe is fairly low cost and is fast and quick to make in the microwave.

microwave

Use the instructions above for making beans in a microwave and making rice in a microwave, You can optionally use half a can of black beans and an 8 ounce packet of microwave rice.

You will turn the rice into Mexican rice.

Break the rice up if it is clumpy. Add 1/4 cup of corn, 1/4 cup sal, and 1/4 teaspoon of cumin. Stir. The rice should still be warm enough to heat up the corn and salsa.

Put the rice and beans into a bowl side by side and top with chopped cilantro, diced avocado, fresh squeezed lime, and either nutritional yeast or cheese.

enchilada

This recipe is fairly low cost and is fast and quick to make in the microwave.

microwave

Make the enchilada sauce by mixing 1/2 can fire roasted tomatoes, 1/2 cup salsa, 1/4 teaspoon cumin, and 1/4 teaspoon chili powder. Because you won't be using a blender, your sauce will be chunkier than usual.

Make the filling by mixing 1/2 can black beans, 1/4 cup corn, 2 tablespoons of chopped fresh cilantro, 1/4 teaspoon of cumin, 1/4 teaspoon chili powder, and 2 tablespoons of salsa. Mix thoroughly.

Use a square or rectangular microwave safe dish. Spread about half a cup of your enchilada sauce on the bottom. Spread it evenly to keep the enchiladas from sticking to the bottom.

Fill and roll your enchiladas one at a time and place them in the microwave safe dish.

Using either corn or flour tortillas, place two or three spoonfuls of the filling into a line down the middle of the tortilla. Roll each tortilla and gently place into the dish with the seam face down.

Top it off with the remainder of the enchilada sauce. Make sure it is even and coats all of the enchiladas. Uncoated portions can become hard in the microwave, Add either nutritional yeast or cheese.

Microwave for about three minutes.

Place the enchiladas on plates. Top with chopped fresh cilantro, diced avocado, and fresh squeezed lime.

bacon

How did bacon become part of the standard American breakfast?

Edward Bernays, nephew of Sigmund Freud, was hired by the Beech-Nut Packing Company in the 1920s to increase bacon sales.

At the time, the typical American breakfast was coffee, juice (often orange juice), and a roll or biscuit.

Bernays pioneered psychology-based press releases and marketing.

Bernays asked the staff doctor at his public relations company if a larger meal in the morning would be better for health. The doctor said “yes”, because the larger amount of nutrients would give more energy in the morning.

Bernays had the doctor send out a letter to about 5,000 doctors he knew and ask them if they agreed.

More than 4,500 of the doctors said “yes”.

Bernays typed up a press release (using an old fashioned typewriter) and sent it out to newspapers across the US. He claimed a “study” had shown doctors recommended a heavy breakfast and added the claim that bacon and eggs was the best choice for a heavy breakfast.

Lots of newspapers published articles about his fake study with his recommended headline of “4,500 physicians urge Americans to eat heavy breakfasts to improve their health”. Most included his eggs and bacon claim.

Bacon sales exploded. Today about 70% of bacon is eaten at breakfast.

He followed up the bacon campaign with a 1930s campaign for Dixie Cup to convince Americans that disposable cups were more sanitary than traditional cups. He used pictures of an overflowing cup that included subliminal images of genitalia and sexually transmitted disease.

He promoted the Light's Golden Jubilee, celebrating the 50th anniversary of Thomas Edison's lightbulb. Note that Nikola Tesla actually invented the lightbulb (Tesla created about 1/3 of Edison's inventions), but Edison took credit on the patent as the company owner. Tesla had been promised a \$50,000 cash bonus if he succeeded. Edison refused to pay. Tesla also invented the electric arc lamp, AC motor, AC generator, AC transmission lines, radio, magnifying transmitter, induction motor, hydroelectric power, shadowgraph (X-ray), neon lights, radio controlled vehicles, and more for a total of 196 patents under his own name. Tesla died in poverty while working on a high energy ray weapon for the British Royal Navy.

Bernays ran political campaigns for Calvin Coolidge, Herbert Hoover, NYC mayor William O'Dwyer, and others. To his credit, Bernays refused to run political campaigns for the Nazis.

During World War II, Bernays advised the United States Information Agency, US Army, and US Navy. The US military and national security organizations still use Bernays' techniques to manipulate public opinion.

Bernays worked for Liggett and Myers (makers of Chesterfield cigarettes). Competitor American Tobacco Company (makers of Lucky Stripes) hired him away to run their cigarette ad campaigns. At the time, very few women smoked tobacco because of social norms. Bernays arranged for famous feminists in the Women's Party to march in the Easter parade, lighting up cigarettes as "torches of freedom" and then participate in the march smoking Lucky Stripes.

Bernays ran a campaign for the United Fruit Company (now Chiquita Brands International) to claim that bananas were good for health. When banana sales soared, the government of Guatemala tried to transfer control of the large banana plantations from the US company to local control, Bernays started a campaign about the supposed corruption and immorality of Guatemala's "Communist menace". Bernays coordinated with the CIA in Operation PBSuccess, running a military coup to overthrow the democratically elected government and put Carlos Castillo Armas into power.

Modern advertising campaigns use Bernays' psychology-based techniques to trick consumers into purchasing the foods that are most profitable for large corporations.

We will see that the Standard American Diet (SAD) is based on psychological manipulation, profits for large corporations, and the use of the US military and intelligence agencies. This is why it is so unhealthy.

government subsidies

The US federal government, as well as many state governments, pay financial subsidies for the food industry to provide selected foods.

"Among the justifications for the 1973 US Farm Bill was to assure consumers a plentiful supply of food at reasonable prices. Four decades later, the US population is burdened by substantial obesity and cardiometabolic disease. Suboptimal diet quality is a leading factor associated with death and disability in the United States. Specifically, diets that are high in calories, saturated fats, salt, and sugars but low in fruits and vegetables have been implicated in the development of cardiometabolic risk factors (obesity or adiposity, elevated blood pressure, elevated lipid levels, and diabetes) and diseases." —[American Medical Association](#)

"The US Department of Agriculture and US Department of Health and Human Services Dietary Guidelines for Americans emphasize consumption of fruits, vegetables, whole grains, protein, and moderate amounts of dairy, while recommending limited consumption of saturated fats, sugars, salt, and refined grains. At the same time, current federal agricultural subsidies focus on financing the production of corn, soybeans, wheat, rice, sorghum, dairy, and livestock, the 2 latter of which are in part via subsidies on feed grains. From 1995 to 2010, approximately \$170 billion was spent on these 7 commodities and programs. A large proportion of these subsidized commodities are converted into high-fat meat and dairy products, refined grains, high-calorie juices and soft drinks (sweetened with corn sweeteners), and processed and packaged foods. For

example, 30% to 40% of the corn, more than half of the soybeans, and almost all of the sorghum grown in the United States are used as feed for US cattle and livestock, while approximately 5% of the corn is converted into high-fructose corn syrup, and the other half of the soybeans are converted into oils.⁸ Because the US agricultural sector produces approximately 80% of the food that Americans eat (the other 20% comes from imports), the foods that are produced domestically matter for the American diet.” —[American Medical Association](#)

some suggestions

I was asked if I could provide recipes for poor people, especially those limited to a microwave oven.

“HOW TO NOT STARVE: You can survive off beans + rice.” —[Soup](#)

Beans and rice are my second and third items discussed here. I will be dropping more comments from Soup as appropriate.

“You can regrow lettuce, bok choy, green onions, basil, carrot tops, and garlic sprouts from the scraps in water or soil on a countertop. When your veg consumption is limited to what you can find, forage, or steal, this might be not only helpful, but crucial.” —[Soup](#)

“Cook in bulk and share. It is much more economical to make 10 servings than it is to make one. If you don’t know your neighbors, it’s okay to knock on their door and ask if they’d like to have some. The worst that can happen is they tell you no.” —[Soup](#)

“You’re going to need to do a lot of labor around food when you find yourself with limited options, so keep your kitchen clean. All you need is bleach, dish soap, water, some rags, energy, and time. Everything else is bonus.” —[Soup](#)

“Use what you already have before trying to find new stuff. Even if it doesn’t appeal to you now, time is a very valuable resource when you don’t have any food.” —[Soup](#)

“Always take help when it is offered. I’m imagining a situation where help is going to be really hard to find, but if there are food boxes, get one. If there is a free meal in the park, go eat it. If you can’t afford to feed yourself, those resources are for you.” —[Soup](#)

[Someone Cares Soup Kitchen](#), 720 W 19th Street, Costa Mesa, California. Open Monday through Friday from 12 opm to 3 pm and Saturday and Sunday from 9 am to 11 am., except for federal and state holidays, except open on Easter. No government funding.

I used ChatGPT to quickly fill out this section with information until I can write better material myself. I noticed how corporate ChatGPT sounds. That was obviously intentionally trained into the AI by the corporate overlords. Even so, I was still surprised at how concerned ChatGPT is with protecting the property rights of the rich.

cooking tips

read the whole recipe: Read the entire before you start cooking. An experienced cook might figure out what's coming up, but you sure don't want to already be making something and suddenly realize that there is a required item you don't have handy or that you needed to already have done a certain time consuming part of a recipe. Reading the recipe twice can help. On the first read through, you are often making the decision on whether you are intereted or not, and you will skim over a lot of details. On the second read, you can pay attention to the details and plan how you will cook the recipe.

take notes: Take notes, especially about anything that you notice that is important or anything you change or any mistakes you made. If you don't write it down, chances are that you won't remember in the future.

prep and organize: Prep and organize before you start cooking. Do all of the prep: wahsing, chopping, dicing, mincing, etc, unless there is some good reason a specific step can't be done ahead of time. Organize all of the ingredients and all of the tools so you know exactly where everything is when you need it.

measure: Measure all of your ingredients. Get real measuring cups and spoons or a cooking scale. An experienced cook can improvise by sight and feel, but even the most experienced cooks prefer to measure.

good knife: At least one good knife is essential. This is probably the single most important item for cooking your own food. It doesn't have to be fancy or expensive, it just needs to be good. Pick a knife that fits well in your hand and holds a sharp edge. You don't have to knap your own knife, but if you learn how to knap an arrow head, you can then knap a lot of basic stone tools. Knapping is the art of creating tools out of stone.

taste test: Test what you are cooking as you cook. That will immediately tell you how things are going while you still have time to adjust. This especially applies to salt, pepper, sugae, and spices in general. Avoid taste testing anything that still has raw eggs or raw meat or uncooked

dough in it, for food safety reasons.

no overcrowding: Don't overcrowd your pan or baking dish. Food won't cook properly if it doesn't have enough room. Closely packed items can end up being steamed rather than browned and the texture of the food can become unpleasant. If your cookware is too small, cook in batches.

handles to the side: Always turn pot and pan handles too the side. If the handle is pointing straight out at you, it only takes one moment of distraciton to spill your meal onto the floor, or even worse onto yourself or your child, with the possibility of serious burns.

stay in the kitchen: Don't leave the kitchen while cooking. You might be surprised how fast food can be ruined while unattended. Beyond ruined food, there is also the chance of fire.

hot pans: Don't put food into a cold pan. Make sure your pan is up to the proper temperature before you put food into it. This is especially true if you put meat into a cold pan. The meat will lose moisture as it slowly heats up, resulting in dry meat.

texture: Watch the texture of your food as it cooks. Texture is as important as flavor. Bad texture can ruin a meal. Often you can improvise changes to get back on course before you end up with a cooking disaster.

substituitions: As you get better at cooking, you will realize when you can make substitutions. Often you can substitute lower cost alternatives to the ingredients the recipe calls for. An old rule of thumb is to improvise while cooking, but not while baking.

spices: Pick your first few spices to meet as many possible different needs as possible. Salt, pepper, and sugar are your first essentials. You might get a general purpose spice mixture just to get started, but over time move away from prepared mixtures and get the range of spices you need. Later you can create your own spice mixes and store them instead of something thrown together by a machine in a factory. Don't let your spices get old. Old varies by spice. When a spice starts to lose or change its flavor, throw it away.

guests: In general you should only serve guests something you have cooked a few times and become familiar with. Often you will make mistakes on the first time you try a recipe.

shopping hints

meal plan: Create a plan for your meals and snacks for a week. Use that plan to create a shopping list. This will make sure you have the items you need for your meal plan and that you avoid overspending and impulse purchases. When preparing your meal plans, check to see what you already have. Any meals using items you already possess will mean less new purchases.

shopping list: Stick to your shopping list as much as possible.

shop alone: If you can, shop alone. Impulse shopping is the biggest extra cost in grocery

shopping. Your children or partner are likely to want to buy things on whim. Ask your family what they want and include it in your meal plan and shopping list.

shop on quiet days: Crowds will tend to make you rush and will sometimes block easy access for making comparisons and the wisest selection. Avoid the busiest days, especially the weekend. Note that many grocery stores start their sales on a Wednesday and may start to run out of items on Monday or Tuesday.

generic items: Generic items are often (not always) made in the same factory as one or more major brands. In general, the generic items will save you money without sacrificing quality. Store brands often provide a similar cost savings.

no hygiene products: Don't buy hygiene products at a grocery store. You will find the exact same products at a lower price at one of the large chains or at a budget or dollar store.

shop on the perimeter: Generally the aisles in the center of the grocery store are filled with processed foods. The back and sides of the store are the easiest to stock, so that's where you find the perishable items, including dairy, fruits, vegetable, meats, etc.

rewards card: Sign up for a rewards card at any of the grocery stores you regularly use. Then use the rewards card when you pay. You will give up privacy (the government can subpoena those records and the grocery chain can sell your information), but many times the discounts are tied to using the rewards card. Also the chain might send you coupons that might be useful.

credit card: If you are going to pay with a credit card, use the credit card that will give the best rewards on grocery shopping. Also, pay off the credit card bill every month rather than let the amount owed pile up with more and more interest.

calculator: Bring a calculator (or use a calculator app on your phone). Stores may show prices per weight, but sometimes you will need to do these calculations yourself. Be careful of shrinkification, where an unscrupulous business cuts the size of their product but keeps the old price. Also keep an ongoing tally of the items you have already selected.

sales: Check the sales (newspapers, store apps, circulars, website, etc.). You might want to modify your meal plan in advance based on what items are on sale. Especially watch for sales on high priced items, such as fish or meat.

Sunday newspaper: Sunday newspapers are mostly advertisements. A lot of those ads are for food and include coupons. If you are willing to take the time to check the prices and clip the coupons, you should save money. Avoid getting something just because there is a coupon available. Check the terms and conditions because there are some coupons that are difficult to actually redeem.

favorite brands: Your favorite brands will usually have a method (website, app, mailing lists, etc.) that alert you to when they are on sale or often provide coupons available only to their loyal customers.

holiday sales: Some items may only be easily available or may be discounted more than normal for certain holidays. As an example, candy is often on sale for Christmas, Easter, Halloween, and Valentine's Day.

bulk: If at all possible, buy items in bulk and save money. You can usually freeze the portion that exceeds your current needs. You may coordinate with neighbors to take advantage of bulk price discounts.

eat before shopping: Eat before you shop. If you are hungry, you are likely to buy much more food.

seasons: Produce (fruits and vegetables) are much lower cost when they are in season. You pay a heavy premium for out of season food. Also, food tastes better when it is in season.

bulk bins: Many stores have bulk bins where you can get a discount price on a variety of items, including grains, nuts, and dried fruit.

nearly expired: Most grocery stores will have special locations where they heavily discount items that are nearing their expiration date. They would rather get some money than simply discard the item. If you know you will be using the item quickly and it is still fresh enough to be enjoyable, you can save money. Learn the locations where these items are sold and check there first. A related discount is when a store discontinues an item and will have a big discount just to get it off their shelves and out of their way.

compare prices: If possible, compare prices between the stores near you. You don't want to increase your transportation costs to the point where it overcomes your savings and you may not have the time to go to multiple stores. If you can find the prices in advance and you have an efficient route for going to more than one store, comparison shopping can save you money.

low cost foods

You can make a lot of different meals from just these items or using these items with something else.

whole chicken (lowest cost way to get chicken)

dried beans, lentils, chickpeas

eggs (the price of eggs has been rising)

pasta

onions

potatoes

salt and pepper

white rice or brown rice

canned tomatoes

ground turkey (usually the lowest cost ground meat)

low cost produce

carrots: Eat raw. Cut them into fry-like shapes and roast in oil and salt in the oven. Low cost year round.

cabbage: Eat raw. Use in stir fries. Shred and add to meals. Make coleslaw. Make sauerkraut. Lowest price in early spring, low cost year round.

onions: Use to add flavor to other foods. Low cost year round. Buy loose by the pound rather than in a bag.

cauliflower: Fry with garlic and turmeric. Lowest price is late spring and early summer.

celery: Use to flavor other foods. Start soup with mixture of chopped carrots, celery, and onion. Use in potato salad. Lowest price is late fall and early winter.

potato: Baked potatoes (see how to bake potatoes in a microwave below). Use as the base food for meals. Lowest price is late fall and early winter, highest price is in the summer. Russet potatoes are generally the lowest cost.

turnips: Use in soup. Use in salad.

radishes: Use in soup. Use in salad. In the spring you can often find them with the tops on, giving you both radish root and radish greens.

lettuce: Use in salad. Use in sandwiches.

sweet potato: Use like potatoes.

peanut butter and jelly sandwich

Peanut butter and jelly sandwiches are one the lowest cost meals available. If you change up the flavor of jelly, it is much less boring.

melting cheese

The following are among the best cheeses to use when you are melting cheese:

- Colby Jack
- Mexican Manchego
- Monterey Jack
- Mozzarella (low moisture)
- Oaxaca
- Pepper Jack
- Queso Quesadilla

cooking tools

knife

Carry a knife in the kitchen at your side, tip pointed straight down blade facing your thigh, arm rigid.

You can also carry the knife with a cutting board, blade flat against the center of the board.

Call out that you are moving with a knife.

Safely handing a knife to someone else:

Giver points the tip of your knife at yourself, with sharp edge away from palm, fingers out of the way.

Receiver grips handle, lift blade directly away from palm, avoiding fingers, then draw back to self.

onion

This idea comes from an unspecified Reddit post. I was unable to find the original. I could find several articles on line where people independently came up with the same idea.

Every article mentions that the dicing process fills the kitchen with onion smell for a substantial period of time (causing anyone who comes near the kitchen to start crying from the onion juices in the air) and some didn't think that the savings were worth that particular hassle.

The poster noticed bags of onion on sale at a price too good to pass up. The poster bought more bags of onions than could reasonably be used before some of the onions would start going bad. I will add that this is a good example of where it can help for neighbors to make these purchases as a group.

The Reddit poster diced the onions, using a food processor to make the job go faster. They then used an ice cream scoop to make "pucks" and flash-froze them for future use.

One article suggested using this technique on smaller quantities of onions simply as a time saving measure. Dice up one weeks worth of onions and freeze ahead.

It should be noted that freezing an onion changes its texture. Unfrozen onions are still great for cooking, but no longer enjoyable raw.

threaded meals

The idea of threaded meals is to plan in advance using leftovers from one meal in subsequent meals.

An example would be a meal of beans and rice and then using the left over beans to make burritos the next day.

Another example would be using left over spaghetti sauce for shakshuka or pizza the next day.

A classic example is raiding all the left overs at once (a process called fending) to make things like a stir-fry, a chopped salad, or a charcuterie board.

brown rice

microwave

Brown Rice: Rinse brown rice and place it in a microwave-safe bowl with water or broth. Cover the bowl and microwave on high for about 15-20 minutes or until the rice is cooked and tender. Let it sit for a few minutes before fluffing with a fork. [ChatGPT]

quinoa

microwave

Quinoa: Microwaving quinoa can save time and effort. Rinse your desired amount of quinoa and place it in a microwave-safe bowl. Add the appropriate amount of water or broth based on the package instructions. Cover the bowl with a microwave-safe lid or microwave-safe plastic wrap, leaving a small vent, and cook on high power for the recommended time (10-12 minutes). Stir and let it stand for a few minutes before fluffing it with a fork. [ChatGPT]

quinoa salad

microwave

Quinoa Salad: Cook quinoa in the microwave as mentioned earlier and let it cool. Combine it with chopped vegetables, herbs, a squeeze of lemon or lime juice, and a drizzle of olive oil. Toss everything together for a nutritious salad. [ChatGPT]

herbed quinoa pilaf

microwave

Herbed Quinoa Pilaf: Cook quinoa in the microwave as mentioned earlier and let it cool slightly. In a separate bowl, mix cooked quinoa with chopped herbs (such as parsley, mint, or basil), diced cucumbers, cherry tomatoes, lemon juice, and a drizzle of olive oil. Season with salt and pepper to taste. [ChatGPT]

Mexican quinoa bowl

microwave

Mexican Quinoa Bowl: In a microwave-safe bowl, combine cooked quinoa, black beans, diced tomatoes, corn, and your choice of seasonings like chili powder, cumin, and lime juice. Microwave on high for 2-3 minutes or until heated through. Top with avocado slices, cilantro, and a squeeze of fresh lime. [ChatGPT]

steamed vegetables

microwave

Steamed Vegetables: Microwave-steamed vegetables retain more nutrients compared to boiling. Simply place your choice of vegetables, like broccoli, carrots, cauliflower, or green beans, in a microwave-safe dish with a small amount of water. Cover the dish with a microwave-safe lid or plastic wrap, leaving a small vent, and cook on high for a few minutes until the vegetables are tender-crisp. Be cautious when removing the cover, as steam will escape. Season with herbs, spices, or a drizzle of olive oil. [ChatGPT]

steamed asparagus with lemon

microwave

Steamed Asparagus with Lemon: Place trimmed asparagus spears in a microwave-safe dish. Drizzle with olive oil, sprinkle with salt and pepper, and add a squeeze of lemon juice. Cover the dish and microwave on high for about 3-4 minutes or until the asparagus is tender-crisp. [ChatGPT]

ratatouille

microwave

Microwaved Ratatouille: Slice eggplant, zucchini, bell peppers, and tomatoes into thin rounds

or cubes. Layer the vegetables in a microwave-safe dish, drizzle with olive oil, sprinkle with herbs like thyme or basil, and season with salt and pepper. Cover the dish and microwave on high for 6-10 minutes or until the vegetables are tender. [ChatGPT]

sweet potato

microwave

Baked Sweet Potatoes: Sweet potatoes are a nutritious and delicious option. Wash the sweet potatoes thoroughly and prick them with a fork to create small holes. Place them on a microwave-safe plate and cook on high for several (5-7) minutes, turning them over halfway through, until they become tender. Cooking time will vary based on the size and power of your microwave. Once cooked, you can enjoy them as is or add your preferred toppings like a sprinkle of cinnamon or a dollop of Greek yogurt. [ChatGPT]

fish fillets

microwave

Fish Fillets: Cooking fish fillets in the microwave is a quick and healthy option. Place a fillet of fish (such as salmon or tilapia) in a microwave-safe dish and season it with herbs, lemon juice, or other preferred seasonings. Cover the dish with a microwave-safe lid or microwave-safe plastic wrap, leaving a small vent, and cook on medium power for a few (3-5) minutes, or until the fish flakes easily with a fork. Cooking time will depend on the thickness of the fillet and the power of your microwave. [ChatGPT]

steamed fish with vegetables

microwave

Steamed Fish with Vegetables: Place a seasoned fillet of fish (such as salmon or cod) on a microwave-safe plate. Arrange some vegetables around the fish, such as broccoli, carrots, zucchini, asparagus, snap peas, and/or bell peppers. Cover the plate with a microwave-safe lid or microwave-safe plastic wrap, leaving a small vent. Microwave on medium power for 3-6 minutes or until the fish is cooked and the vegetables are tender. [ChatGPT]

stuffed bell peppers

microwave

Stuffed Bell Peppers: Cut the tops off bell peppers and remove the seeds. Stuff them with a mixture of cooked quinoa or brown rice, lean ground turkey or chicken or beef or black beans, diced vegetables, and spices. Place the stuffed peppers in a microwave-safe dish, cover with a microwave-safe plate, leaving a small vent, and cook on high for about 8-10 minutes or until the

peppers are tender and the filling is cooked through. [ChatGPT]

Remember to always immediately wash your hands after touching raw chicken or eggs. Before touching anything else. To prevent cross-contamination.

stuffed bell pepper soup

microwave

Stuffed Bell Pepper Soup: Dice bell peppers and onions, and place them in a microwave-safe bowl. Add cooked lean ground turkey or chicken, canned diced tomatoes, low-sodium broth, and seasonings. Cover the bowl and microwave on high for about 5-6 minutes or until the soup is heated through. [ChatGPT]

Remember to always immediately wash your hands after touching raw chicken or eggs. Before touching anything else. To prevent cross-contamination.

stuffed mushrooms

microwave

Stuffed Mushrooms: Remove the stems from large mushrooms and place them on a microwave-safe plate. In a bowl, mix together breadcrumbs, chopped vegetables, herbs, and a little olive oil. Spoon the filling into the mushroom caps and microwave on high for 3-4 minutes or until the mushrooms are tender and the filling is heated through. [ChatGPT]

Stuffed Mushrooms: Remove the stems from large mushrooms and fill the cavities with a mixture of cooked quinoa, diced vegetables, and herbs. Place the stuffed mushrooms on a microwave-safe plate and cook on high for about 3-4 minutes or until the mushrooms are tender and the filling is heated through. [ChatGPT]

Stuffed Mushrooms: Remove the stems from large mushrooms and place them in a microwave-safe dish. In a separate bowl, mix breadcrumbs, chopped mushroom stems, diced vegetables, herbs, and a small amount of cheese. Stuff the mixture into the mushroom caps, place them in the dish, cover, and microwave on high for 4-6 minutes or until the mushrooms are tender and the filling is cooked. [ChatGPT]

lentil soup

microwave

Lentil Soup: Combine lentils, diced vegetables, broth, and spices in a microwave-safe bowl. Cover the bowl and microwave on high for about 10-12 minutes or until the lentils are cooked through and the vegetables are tender. Stir occasionally and season to taste. [ChatGPT]

lentil dahl

microwave

Microwave Lentil Dahl: In a microwave-safe bowl, combine lentils, diced onions, garlic, ginger, curry powder, turmeric, and vegetable broth. Cover the bowl and microwave on high for 10-12 minutes or until the lentils are cooked through and the flavors have melded together. Stir in some coconut milk and heat for an additional minute or two. [ChatGPT]

poached chicken breast

microwave

Poached Chicken Breast: Place a boneless, skinless chicken breast in a microwave-safe dish and add enough chicken broth to cover it. Cover the dish with a microwave-safe lid or microwave-safe plastic wrap, leaving a small vent. Microwave on medium power for 8-10 minutes or until the chicken is cooked through. Shred or slice the chicken and use it in salads or sandwiches. [ChatGPT]

Remember to always immediately wash your hands after touching raw chicken or eggs. Before touching anything else. To prevent cross-contamination.

stuffed chicken

microwave

Spinach and Feta Stuffed Chicken Breast: Flatten a chicken breast and place a mixture of cooked spinach and crumbled feta cheese on one side. Roll the chicken breast and secure with toothpicks. Place it in a microwave-safe dish, cover, and microwave on medium power for 6-8 minutes or until the chicken is cooked through. [ChatGPT]

Remember to always immediately wash your hands after touching raw chicken or eggs. Before touching anything else. To prevent cross-contamination.

oatmeal

microwave

Oatmeal: Combine oats and water or milk in a microwave-safe bowl. Microwave on high for 1-2 minutes, stirring occasionally, until the oatmeal reaches your desired consistency. Add toppings like fresh fruits, nuts, or seeds for extra nutrition. [ChatGPT]

tuna wraps

no cooking

You can chop the vegetables in advance and store them in plastic containers. Keep items separate until just before eating so it doesn't become soggy.

Lay out two flour tortillas.

Put half a can of tuna on each. Look for canned tuna on sale. Drain the liquid before using.

Top with any green vegetable such as lettuce or spinach.

Sprinkle shredded or chopped carrot.

Add optional chopped vegetables for more flavor.

Top with the cheapest ranch dressing you can find (or make your own at home).

Roll up into two wraps and enjoy.

macaroni and cheese*microwave*

Mix 1/2 cup elbow macaroni, 1/2 cup water, and salt in a microwaveable cup or container.

Microwave for 2-3 minutes. Stir.

Add 3 tablespoons of milk, 1/4 cup shredded cheddar cheese, salt, and pepper. Stir.

Microwave for another 30 seconds.

Optionally garnish with fresh chives.

western omelet*microwave*

Place into a microwave safe mug or container: 2 eggs, 1/2 bell pepper (diced), 1/4 yellow or white onion (diced), 1/4 cup fresh spinach, optionally 2 slices of ham (diced), salt, and pepper.

Stir.

Microwave for 1 to 1-1/2 minutes, making sure the egg doesn't boil over.

Stir.

Microwave another 1 to 1-1/2 minutes until done.

poached eggs

microwave

Poached Eggs: Poaching eggs in the microwave is a quick and easy method. Fill a microwave-safe bowl or mug with half a cup of water. Gently crack an egg into the water, making sure it's completely submerged. Cover the bowl or mug with a microwave-safe plate or microwave-safe plastic wrap, leaving a small vent. Microwave on medium power for about 1-2 minutes, depending on your desired level of doneness. Keep a close eye on it to avoid overcooking. Use a slotted spoon to remove the poached egg from the water. [ChatGPT]

mug omelette

microwave

Mug Omelette: Beat eggs in a microwave-safe mug or bowl. Add diced vegetables, shredded cheese, and seasonings. Microwave on high for about 1-2 minutes, stirring once, until the eggs are set. Enjoy a quick and easy omelette. [ChatGPT]

egg muffins

microwave

Microwave Egg Muffins: Beat eggs in a microwave-safe bowl and add in diced vegetables (such as bell peppers, spinach, or mushrooms), cooked lean ham or turkey, and shredded cheese. Season with salt, pepper, and herbs. Pour the mixture into greased muffin cups or a microwave-safe dish. Microwave on medium power for 2-3 minutes or high for about 1-2 minutes per muffin or until the eggs are set and cooked through. Enjoy a protein-packed breakfast or snack. [ChatGPT]

asdf

microwave

Vegetable Frittata: Beat eggs in a microwave-safe bowl and add diced vegetables, herbs, and a sprinkle of cheese. Microwave on medium power for 3-4 minutes or until the eggs are set. Let it cool slightly before cutting into slices. [ChatGPT]

quesadilla

microwave

Microwave two medium flour tortillas on a plate until slightly crispy. Let them cool.

Mix ingredients in a microwave safe bowl. Everything other than cheese is optional. Avoid

overloading with too many ingredients.

Required ingredients:

- 1/4 cup shredded cheddar cheese or Monterey Jack (other options if you are near a low cost Mexican grocery store include manchego, queso asadero, oaxaca, or chihuahua)
- 1 tablespoon taco seasoning

Optional ingredients:

- butter or olive oil
- 1/2 bell pepper (diced)
- 1/4 medium onion (diced)
- sliced mushrooms
- sliced black olives
- diced green onions
- diced tomato
- avocado
- lettuce

Mix the ingredients well. Microwave in the bowl for 1 to 2 minutes until the peppers are soft.

Spread the mixture evenly across the surface of one of the tortillas. Cover with the other tortilla.

Microwave for another 30 seconds to 1 minute.

Slice into triangles.

bean burrito

microwave

Mexican Bean Burrito: In a microwave-safe bowl, mix cooked beans, diced tomatoes, corn, and seasonings. Cover the bowl and microwave on high for about 3-4 minutes or until heated through. Spoon the mixture onto a whole wheat tortilla, sprinkle with grated cheese, and roll it up. Microwave for an additional 30 seconds to melt the cheese. [ChatGPT]

chilli

microwave

A quick microwave chilli recipe created by Jack Monroe

Put 1/2 small onion (finely chopped), 1 crushed garlic clove, a knob of butter, 1/2 tsp ground cumin, 1/2 tsp paprika (sweet or smoked), pinch of chilli flakes or chilli powder into a

microwaveable container. Stir. Heat in microwave on High for 30-40 seconds. Let stand for 1 minute.

Add 400g can of chopped tomatoes (drained and juice saved), 400g can kidney beans (drained and rinsed), 1/2 vegetable stock cube, and 2 squares dark chocolate.

Cover with cling wrap and pierce three times. Place paper towel on microwave turntable, then put container on top.

Cook on High for 2 minutes. Add some of the saved tomato juice if the chilli starts to dry out. Stir well and let stand for 1 minute.

Cover and cook on Medium for another 2 minutes. Give it a stir and allow to stand for 1 minute.

Optionally top with sour cream and/or coriander.

spaghetti squash

microwave

Spaghetti Squash: Cut a spaghetti squash in half lengthwise and scoop out the seeds. Place one half in a microwave-safe dish with a little water. Microwave on high for 10-12 minutes or until the flesh can easily be scraped into spaghetti-like strands with a fork. Repeat with the other half. Serve with your favorite sauce or use it as a base for a vegetable stir-fry. [ChatGPT]

edamame

microwave

Steamed Edamame: Place fresh or frozen edamame in a microwave-safe bowl with a little water. Cover the bowl and microwave on high for 2-3 minutes or until the edamame is tender. Drain the water, sprinkle with salt or other seasonings, and enjoy as a protein-rich snack. [ChatGPT]

mashed cauliflower

microwave

Mashed Cauliflower: Cut a head of cauliflower into florets and place them in a microwave-safe dish with a little water. Cover the dish and microwave on high for 5-10 minutes or until the cauliflower is tender. Drain the water and transfer the cooked cauliflower to a bowl. Mash the cauliflower with a fork or potato masher. Season with salt, pepper, herbs, spices, or a drizzle of olive oil. [ChatGPT]

veggie chips

microwave

Veggie Chips: Thinly slice vegetables like sweet potatoes, beets, or kale into even pieces. Place them on a microwave-safe plate, ensuring they don't overlap. Microwave on high for 2-3 minutes, flipping halfway through, until the chips are crispy. Season with spices like paprika, garlic powder, or sea salt. [ChatGPT]

tomato and mozzarella salad

microwave

Tomato and Mozzarella Salad: Slice tomatoes and fresh mozzarella cheese and arrange them on a microwave-safe plate. Drizzle with olive oil and balsamic vinegar, and sprinkle with salt, pepper, and fresh basil. Microwave on medium power for about 1-2 minutes or until the cheese starts to melt. [ChatGPT]

apple crisp

microwave

Apple Crisp: Slice apples and place them in a microwave-safe dish. In a separate bowl, mix oats, a small amount of flour, cinnamon, and a sweetener of your choice. Spread the oat mixture over the apples, drizzle with melted butter or coconut oil, and microwave on high for about 5-6 minutes or until the apples are tender and the topping is crispy. [ChatGPT]

baked apples

microwave

Microwave Baked Apples: Core and slice apples into rings or cubes. Place them in a microwave-safe dish and sprinkle with cinnamon, nutmeg, and a little honey or maple syrup. Cover the dish and microwave on high for 3-4 minutes or until the apples are tender and slightly caramelized. [ChatGPT]

Baked Apples: Core an apple and place it in a microwave-safe dish. Fill the hollowed center with a mixture of oats, cinnamon, and a sweetener like honey or maple syrup. Microwave on high for 3-4 minutes or until the apple is soft and tender. Enjoy it as a healthy dessert or snack. [ChatGPT]

Baked Apples: Core an apple and place it in a microwave-safe dish. Fill the center with a mixture of cinnamon, raisins, and a small amount of honey or maple syrup. Microwave on high for about 2-3 minutes or until the apple is tender. Serve as is or with a dollop of Greek yogurt.

[ChatGPT]

chia pudding

microwave

Chia Pudding: In a microwave-safe bowl, mix chia seeds, milk (dairy or plant-based), and a sweetener like honey or maple syrup. Microwave on medium power for 1-2 minutes, stirring halfway through. Let it sit for a few minutes until the chia seeds absorb the liquid and the mixture thickens. Top with fruits, nuts, or seeds. [ChatGPT]

Greek yogurt parfait

microwave

Greek Yogurt Parfait: Layer Greek yogurt, fresh fruits, and granola in a microwave-safe bowl or jar. Microwave on medium power for 1 minute to soften the fruits slightly and enhance the flavors. Enjoy a quick and nutritious parfait. [ChatGPT]

chuño

Chuño is a native process from South America to freeze and preserve potatoes. See [Chuño at Wikipedia](#).

“You can also straight-up freeze cooked potatoes! If you have freezer space, some mashed potatoes or diced cubed potatoes can stay good in there for upwards of a year.” —[CM Wilson](#)

“YOU CAN BURY THEM! if you bury a potato, you can grow a new potato! so if a potato goes bad and is uncooked, you can use them as a seed potato! I learned it on reading rainbow.” —[Gummybear](#)

lentils

“Dried Lentils don’t have to be soaked! I lived on lentils and rice for awhile when money was very tight.” —[Black Chic with the red Truck](#)

“Dried lentils also absorb a lot of flavor, a wild onion will turn dried lentils gourmet” —[@Jammedtomb](#)

“I usually use an Italian seasoning blend but that does sound good!” —[Black Chic with the red Truck](#)

dandelion

“Dandelion leaves are a healthy bitter green with a lot of vitamin C. Don’t pick where sprayed. The bitterness can be fixed with blanching + frying w strong flavors.” —[Soup](#)

“Generally when harvesting dandelion greens or anything wild you wanna make sure it’s 50 ft from any street due to contamination from oil and lead! Safe harvesting!” —[@gh_000_st](#)

“I did the dandelion thing. I went through a rough patch working as an educational assistant disabled me. I learned to forge wild plants in my neighborhood when food banks were low. Fried wild grape leaves are delicious. Garlic mustard is great! Wild onions grow everywhere!” —[EA Survivor](#)

“Dandelion roots can be cleaned and roasted, season like you would a root or dry out for a coffee substitute.” —[@Jammedtomb](#)

“Dandelion can be fried or make into tea (twice a day per serving of tea) but remember to soak them in salt water first. My great grandma did this to chase out bugs. The whole plant can be used but not always for the same thing ” —[@StillMaskedLevi](#)

“Dandelion goes great in a salad as well!” —[Ruya](#)

“I KNOW THAT! my mom taught me that! the dandelion itself is toxic but the leaves are perfectly healthy! we used to pick them for our Tortoise “Torty” and let him eat them as a snack or a treat! they were his favorite food.” —[Gummybear](#)

“Dandelion greens improves the secretions of insulin, thus lowering blood sugar. Just a little

FYI.” —[Punk Roxie](#)

“Lamb’s quarters, pigweed - amaranth, cat-tails, shredded cabbage into “burgers”, purslane succulent, get a forage manual, urban harvesting. Some states allow buying seeds, quick grow spinach lettuce chard.” —[@alexjacobs](#)

“I eat mostly frozen greens like collards and spinach. I like fresh Swiss chard & bok choy though. Greens are nutrient dense so you don’t need to eat mountains of them. I eat about 3-6 oz/day, put them in everything, soups, tofu scrambles, curries, stir fries, as sides.” —[@squirreelpalooza](#)

“Careful with the spinach and chard...huge kidney stone makers. Drink lemon water daily to try to counteract...” —[@leftybarner](#)

“a caution - don’t eat wild carrots” —[Noelle Dickinson](#)

“Wild onions and wild asparagus can be found near and in ditches, only cut asparagus that’s under 8 inches for best flavor and texture. The asparagus blooms create more asparagus, leave them” —[@Jammedtomb](#)

“Japanese knotweed can be eaten cooked down into a sauce, similar to rhubarb, slightly slimier. Sunchokes or Jerusalem Artichokes have a tuber that needs a long cooking time but they are starchy and nutritious. Hostas are entirely edible and in the asparagus family.” —[Amy Bradstreet](#)

Foraging dandelions is a great way to enjoy the edible and medicinal properties of these common wild plants. Here’s a step-by-step guide on how to forage dandelions: [ChatGPT]

1. Identify the dandelion: Dandelions (*Taraxacum officinale*) are easily recognizable with their bright yellow flowers and distinctive toothed leaves. They typically grow in open fields, lawns, meadows, and disturbed areas. [ChatGPT]
2. Choose a clean location: Select an area where the dandelions are unlikely to have been exposed to pesticides, herbicides, or other contaminants. Avoid foraging near roadsides or

areas that might have been contaminated by pollutants. [ChatGPT]

3. Harvesting the leaves: Dandelion leaves are best when young and tender, typically in the spring. Look for rosettes of leaves close to the ground. Use a pair of scissors or your fingers to snap off the leaves near the base. Aim to gather leaves that are vibrant and free from damage or discoloration. [ChatGPT]
4. Harvesting the flowers: Dandelion flowers are typically harvested in late spring or early summer when they are fully open. Snip off the flower heads at the base of the stem using scissors or pinch them off with your fingers. Choose flowers that are fully developed and brightly colored. [ChatGPT]
5. Harvesting the roots (optional): Dandelion roots can also be harvested for their medicinal properties or culinary uses. This is usually done in the fall when the plant has stored up nutrients in the root. Dig around the base of the plant with a garden trowel or a small shovel, being careful not to damage the roots. Lift the entire root out of the ground, brush off the excess soil, and wash it thoroughly. [ChatGPT]
6. Cleaning the foraged parts: Once you've harvested the leaves, flowers, or roots, bring them indoors and wash them gently under running water to remove any dirt or insects. Pat them dry with a clean towel or paper towel. [ChatGPT]
7. Using the foraged dandelions: Dandelion leaves can be used fresh in salads or cooked like other leafy greens such as spinach. The flowers can be used to make dandelion tea, infused in oil to make herbal salves, or used in baking and other culinary preparations. The roots can be dried and roasted to make a coffee substitute or used in herbal remedies. [ChatGPT]

Remember to forage responsibly by only taking what you need and being mindful of the environment. It's also essential to positively identify plants before consuming them, especially if you're new to foraging. If in doubt, consult with a knowledgeable local forager or expert. [ChatGPT]

lamb's quarter

Lamb's quarter (*Chenopodium album*) is an edible wild plant that belongs to the amaranth family. It is also known by other names such as goosefoot or wild spinach. Foraging lamb's quarter can be a rewarding experience, and here are some steps to help you get started: [ChatGPT]

1. Identification: Familiarize yourself with the appearance of lamb's quarter. It typically grows as a tall, upright plant with diamond-shaped or triangular leaves that have toothed edges. The leaves are usually light green on the upper surface and have a white, powdery coating on the underside. The plant may reach a height of 2 to 6 feet (0.6 to 1.8 meters). [ChatGPT]
2. Season and habitat: Lamb's quarter is a common weed found in various parts of the world. It thrives in fertile soil, disturbed areas, gardens, and fields. The plant tends to grow from spring to autumn, so it's best to forage during these seasons. [ChatGPT]
3. Location: Look for lamb's quarter in areas where it's likely to grow, such as gardens, cultivated fields, abandoned lots, or along roadsides. It can often be found near other edible

wild plants, so keep an eye out for them as well. [ChatGPT]

4. Harvesting: To harvest lamb's quarter, follow these guidelines: [ChatGPT]
 - Choose plants that are healthy, vibrant, and free from signs of disease or pests. [ChatGPT]
 - Use scissors or your fingers to carefully snip off the upper parts of the plant, including the tender leaves and stem tips. You can also uproot the entire plant if desired. [ChatGPT]
 - Collect a reasonable amount, keeping in mind the sustainability of the plant population and leaving enough for regrowth. [ChatGPT]
5. Preparation: Once you've gathered lamb's quarter, it's essential to clean and prepare it properly: [ChatGPT]
 - Remove any damaged or discolored leaves and discard any tough stems. [ChatGPT]
 - Rinse the leaves thoroughly under running water to remove dirt, insects, or any other impurities. [ChatGPT]
 - You can use lamb's quarter in recipes that call for leafy greens. It can be enjoyed raw in salads or cooked in various dishes such as sautés, stir-fries, soups, or as a substitute for spinach. [ChatGPT]

Remember, when foraging for any wild plant, it's crucial to be absolutely certain of its identification to avoid consuming something toxic or harmful. If you're unsure, consult with an experienced forager, botanist, or a reliable field guide specific to your region. [ChatGPT]

burdock

Foraging burdock (*Arctium* spp.) can be a rewarding experience, as it provides both edible and medicinal uses. Burdock is a biennial plant known for its large leaves and distinctive burrs. Here are some steps to help you forage burdock: [ChatGPT]

1. Identification: Familiarize yourself with the appearance of burdock to ensure you're harvesting the correct plant. Burdock plants have large, heart-shaped leaves that are woolly underneath and can grow up to 2 feet (0.6 meters) in length. In the second year of growth, they produce tall flower stalks with round, prickly burrs. [ChatGPT]
2. Season and habitat: Burdock is typically found in late spring to early summer, and it thrives in disturbed areas, meadows, fields, and roadsides. Look for areas with rich, loamy soil where burdock is likely to grow. [ChatGPT]
3. Location: Locate burdock plants by searching in areas where they are known to grow. Look for plants with large, broad leaves and sturdy stalks. You may also spot the distinctive burrs in the second year of growth. [ChatGPT]
4. Harvesting: Follow these guidelines when harvesting burdock: [ChatGPT]
 - Choose plants that are healthy and free from signs of disease or pests. [ChatGPT]
 - Use a sturdy digging tool, such as a garden fork, to loosen the soil around the base of the plant. [ChatGPT]
 - Gently lift the plant from the ground, being careful not to damage the root system. [ChatGPT]

- Shake off any excess soil and remove the leaves, leaving only the root. The root is the most commonly used part of the burdock plant. [ChatGPT]
- 5. Preparation: Once you've harvested the burdock roots, you'll need to clean and prepare them before use: [ChatGPT]
 - Use a brush or scrubbing pad to remove dirt and debris from the roots. [ChatGPT]
 - Peel the outer skin of the root using a vegetable peeler or knife. The inner white flesh is what you'll use for cooking or medicinal purposes. [ChatGPT]
 - Cut the roots into smaller pieces or slice them into thin strips, depending on your intended use. [ChatGPT]
- 6. Cooking and medicinal uses: Burdock roots can be used in a variety of ways: [ChatGPT]
 - Culinary: Burdock roots are often used in stir-fries, soups, stews, and vegetable dishes. They have a mild, earthy flavor and a crunchy texture. [ChatGPT]
 - Medicinal: Burdock root has traditionally been used for its detoxifying and purifying properties. It can be brewed as a tea or used as an ingredient in herbal preparations. Consult reliable sources or a herbalist for specific medicinal uses and dosage recommendations. [ChatGPT]

As with any foraging, it's crucial to positively identify the plant before harvesting and to avoid areas that may have been exposed to pollutants or pesticides. If you're uncertain about the identification or usage of burdock, consult with an experienced forager, botanist, or herbalist for guidance. [ChatGPT]

milkweed

Foraging milkweed (*Asclepias* spp.) can be a rewarding experience, as it provides edible parts and serves as a host plant for monarch butterflies. However, it's important to note that certain milkweed species contain toxic compounds, so proper identification is crucial. Here are some steps to help you forage milkweed: [ChatGPT]

1. Identification: Familiarize yourself with the characteristics of milkweed plants to ensure you're harvesting the correct species. There are several species of milkweed, so it's essential to be specific to your region. Look for these general features: [ChatGPT]
 - Milkweed plants typically have thick, upright stems with opposite or whorled leaves. [ChatGPT]
 - The leaves are often broad and oval-shaped, and some species have a milky sap that gives the plant its name. [ChatGPT]
 - Milkweed flowers are usually clustered and have a unique shape, with a central "crown" surrounded by petals. [ChatGPT]
 - The seedpods of milkweed are large and elongated, containing numerous seeds with fluffy fibers. [ChatGPT]
2. Season and habitat: Milkweed is commonly found in meadows, fields, roadsides, and disturbed areas. The best time to forage milkweed depends on the specific species and your location, but generally, the plants flower in late spring or summer, and the seedpods mature later in the season. [ChatGPT]

3. **Location:** Search for milkweed in areas where it's known to grow. Look for open areas with appropriate habitats such as fields or sunny edges of forests. Some species of milkweed may prefer specific soil types or moisture levels, so understanding their preferences can be helpful in locating them. [ChatGPT]
4. **Harvesting:** Follow these guidelines when harvesting milkweed: [ChatGPT]
 - Ensure proper identification of the milkweed species you're targeting. [ChatGPT]
 - Harvest young shoots, leaves, flower buds, flowers, or seedpods, depending on your intended use. [ChatGPT]
 - Use scissors or a sharp knife to cut the parts you wish to harvest. Be careful to avoid damaging the main stem or the plant's growth points. [ChatGPT]
 - If collecting seedpods, wait until they are mature and dry, usually late summer or early autumn. Gently open the pods and collect the seeds with their fluffy fibers attached. [ChatGPT]
5. **Preparation and uses:** Milkweed can be used in various ways, but it's important to note that not all parts of every milkweed species are edible. Here are a few common uses: [ChatGPT]
 - Edible shoots and leaves: Young shoots and leaves of some milkweed species can be harvested and prepared like asparagus or spinach. However, certain species contain toxic compounds that need to be removed through proper preparation methods, such as boiling or blanching. [ChatGPT]
 - Flower buds and flowers: Milkweed flower buds and flowers can be used in salads, stir-fries, or as a garnish. They have a mild, slightly sweet flavor. [ChatGPT]
 - Seed fibers: The fluffy fibers attached to milkweed seeds can be used for various crafts, such as stuffing pillows or making cordage. [ChatGPT]

Remember, it's crucial to positively identify the milkweed species and to research specific preparation methods for the species you're foraging. If you're uncertain about identification or usage, consult with an experienced forager, botanist, or a reliable field guide specific to your region. [ChatGPT]

curly dock

Foraging curly dock (*Rumex crispus*) can be a rewarding experience, as this wild plant offers edible leaves and seeds. Curly dock is a perennial plant that is commonly found in fields, meadows, and waste areas. Here are some steps to help you forage curly dock: [ChatGPT]

1. **Identification:** Familiarize yourself with the characteristics of curly dock to ensure you're harvesting the correct plant. Look for these key features: [ChatGPT]
 - Curly dock has long, lance-shaped leaves with wavy or curly edges, which give it its name. [ChatGPT]
 - The leaves are usually dark green and have prominent veins. [ChatGPT]
 - The plant can grow up to 3 to 6 feet (0.9 to 1.8 meters) tall. [ChatGPT]
 - In late spring or early summer, curly dock produces tall flower stalks with clusters of small greenish flowers that turn reddish-brown as they mature. [ChatGPT]

2. Season and habitat: Curly dock can be found throughout the growing season, from spring to autumn. It thrives in a variety of habitats, including open fields, disturbed areas, roadsides, and gardens. [ChatGPT]
3. Location: Look for curly dock in areas where it's likely to grow. It often prefers sunny or partially shaded locations with well-drained soil. [ChatGPT]
4. Harvesting: Follow these guidelines when harvesting curly dock: [ChatGPT]
 - Choose plants that are healthy and free from signs of disease or pests. [ChatGPT]
 - Curly dock leaves can be harvested throughout the growing season, but younger leaves tend to be more tender and flavorful. [ChatGPT]
 - Use scissors or your fingers to harvest the leaves by cutting them close to the base of the plant. Alternatively, you can snap off the larger leaves by hand. [ChatGPT]
 - If you wish to harvest the seeds, wait until the seed heads have turned brown and are dry. Gently rub the seed heads between your fingers or shake them to release the seeds. [ChatGPT]
5. Preparation and uses: Curly dock leaves and seeds can be used in various ways: [ChatGPT]
 - Leaves: The young leaves of curly dock can be used raw in salads or cooked in recipes that call for leafy greens. However, keep in mind that the leaves have a slightly tart or tangy flavor. [ChatGPT]
 - Seeds: The seeds of curly dock can be ground into flour or used as a grain substitute in recipes. They have a nutty flavor. [ChatGPT]
 - It's important to note that some people may have a sensitivity or allergic reaction to the oxalates present in curly dock, so it's advisable to consume it in moderation. [ChatGPT]

Always be cautious when foraging and ensure proper identification of curly dock to avoid any potential risks or confusion with toxic plants. If you're uncertain about identification or usage, consult with an experienced forager, botanist, or a reliable field guide specific to your region. [ChatGPT]

stinging nettle

“Stinging nettles are EXCELLENT wild greens. Pick with gloves and long sleeves but the “sting” is neutralized with cooking. They are mild and can be steamed and used just like spinach. New leaves are best. Cut older plants down and harvest new leaves as they grow back.”

—[Barbara Banfield](#)

“And do not harvest after they have gone to seed, an important piece.” —[Mutt](#)

Foraging stinging nettle can be a rewarding experience, but it's essential to take precautions to avoid getting stung. Stinging nettle (*Urtica dioica*) is a versatile plant with various culinary and

medicinal uses. Here's a step-by-step guide on how to forage stinging nettle: [ChatGPT]

1. Choose the right location: Look for stinging nettle in areas such as meadows, fields, woodlands, and near water sources. Make sure the area is free from chemical contamination and away from busy roads. [ChatGPT]
2. Wear protective clothing: Stinging nettle has tiny hairs on its leaves and stems that can cause skin irritation. Before venturing out, wear long pants, a long-sleeved shirt, gloves, and closed-toe shoes. Consider wearing goggles and using gardening shears or gloves with rubberized grips for added protection. [ChatGPT]
3. Identify stinging nettle: Stinging nettle has heart-shaped, toothed leaves that are bright green and covered with tiny stinging hairs. The plant can grow up to 3-7 feet tall and forms dense clusters. Be cautious and avoid touching the plant with your bare skin. [ChatGPT]
4. Harvesting: Once you've located a patch of stinging nettle, carefully cut the top 4-6 inches of the plant, just above a set of leaves. This encourages the plant to produce new growth and helps with sustainability. Use gardening shears or scissors to make a clean cut. Place the harvested nettle in a basket or bag. [ChatGPT]
5. Handling: To avoid stings while handling the nettle, use gloves or a cloth to hold the plants. Take care not to crush or compress the leaves, as this can release the stinging compounds. [ChatGPT]
6. Transporting: If you're foraging stinging nettle in the field, place the harvested nettle in a breathable bag or container. A paper bag or a basket with good airflow is ideal to prevent the nettle from wilting. [ChatGPT]
7. Processing: Once you're back home, handle the nettle with gloves or tongs until it's cooked or dried. Cooking, drying, or steeping the nettle in hot water neutralizes the stinging compounds, rendering it safe to handle and consume. [ChatGPT]
8. Preparation: Stinging nettle can be used in various recipes, such as soups, stews, teas, and pestos. To cook with stinging nettle, blanch the leaves in boiling water for a few minutes to remove any residual stinging hairs. Afterward, you can use the blanched nettle as you would with any other greens. [ChatGPT]

Remember, proper identification is crucial to ensure you're harvesting stinging nettle and not a similar-looking plant. It's always a good idea to consult local foraging guides or seek guidance from experienced foragers before venturing out. Additionally, be mindful of conservation ethics and avoid overharvesting, allowing the plant to regenerate and maintain its populations. [ChatGPT]

wild peppermint

Foraging wild peppermint (*Mentha piperita*) can be a delightful way to enjoy the refreshing aroma and taste of this aromatic herb. Here's a step-by-step guide on how to forage wild peppermint: [ChatGPT]

1. Find the right location: Wild peppermint can be found in a variety of habitats, including meadows, fields, stream banks, and along the edges of woodlands. Look for areas with moist soil and partial sunlight, as these conditions are favorable for peppermint growth.

[ChatGPT]

2. Identify peppermint: Wild peppermint has square stems with opposite leaves. The leaves are dark green, oval-shaped, and have serrated edges. When you crush the leaves, they release a strong minty aroma. Additionally, peppermint produces clusters of small purple or pink flowers in the summer. [ChatGPT]
3. Harvesting: To harvest wild peppermint, locate a healthy plant and use scissors or gardening shears to cut the stems just above a set of leaves. You can either gather individual stems or cut larger bunches. Make sure to leave a portion of the plant intact, allowing it to regrow. [ChatGPT]
4. Handling: Unlike stinging nettle, peppermint doesn't have any stinging or irritating properties. However, it's still a good practice to wear gloves when handling the plants to avoid any potential skin irritation or to protect against thorns or other hazards that may be present in the area. [ChatGPT]
5. Transporting: After harvesting, place the wild peppermint stems in a breathable bag or basket to allow for airflow and prevent wilting. This will help maintain the freshness and flavor of the herb. [ChatGPT]
6. Processing: Once you're back home, inspect the harvested peppermint and remove any damaged or discolored leaves. Rinse the stems and leaves under cool water to remove any dirt or debris. Shake off excess water or pat them gently with a towel. [ChatGPT]
7. Drying or using fresh: Wild peppermint can be used fresh or dried. To dry the peppermint, tie the stems together in small bundles and hang them upside down in a cool, well-ventilated area. Once completely dry, remove the leaves from the stems and store them in airtight containers. [ChatGPT]
8. Usage: Wild peppermint can be used in various culinary applications, including teas, infusions, desserts, and savory dishes. Fresh peppermint leaves can be used immediately, while dried leaves can be steeped in hot water for a refreshing tea or used as a flavorful ingredient in cooking. [ChatGPT]

When foraging wild peppermint or any other wild plant, it's important to be mindful of the environment and practice sustainable harvesting. Only take what you need, leave enough plants for regeneration, and avoid foraging in protected areas or where the plant populations are scarce. [ChatGPT]

cattails

Foraging cattails can be a rewarding and useful activity. Cattails (*Typha* spp.) are versatile wetland plants that offer various edible and practical parts. Here's a step-by-step guide on how to forage cattails: [ChatGPT]

1. Identify the plant: Cattails are easily recognizable with their tall, spear-like leaves and distinctive brown, cylindrical flower spikes. They grow in wetland areas, such as marshes, swamps, and along the edges of ponds and lakes. [ChatGPT]
2. Choose the right time: The best time to forage cattails is during their peak season, which typically occurs in late spring or early summer when the flower spikes are fully developed

but have not released their seeds yet. [ChatGPT]

3. Harvest the flower spikes: Look for mature flower spikes that are brown in color but still intact. Cut the spikes at the base using a sharp knife or scissors. These spikes are edible and can be used in various ways, such as in salads or as a vegetable. [ChatGPT]
4. Collect the pollen (optional): If you're interested in harvesting cattail pollen, you can do so by gently tapping the mature flower spikes over a container. The pollen will fall out and can be collected for culinary purposes. [ChatGPT]
5. Harvest the young shoots (optional): Cattail shoots are tender and edible when they are still young and haven't fully emerged from the ground. Look for shoots that are around 1 to 2 feet tall, and cut them at the base. Peel off the outer layers to reveal the tender core. The shoots can be eaten raw or cooked. [ChatGPT]
6. Process the harvested parts: Once you've gathered the flower spikes, pollen, or shoots, it's important to process them before consumption. Remove any debris or excess fibers and wash them thoroughly. Trim off any tough or woody parts. [ChatGPT]
7. Prepare and enjoy: Cattail flower spikes can be used in salads, stir-fries, soups, or even roasted over a fire. The pollen can be used as a flour substitute in baking or added to smoothies for extra nutrition. The young shoots can be used as a vegetable in various dishes. [ChatGPT]

Remember these important guidelines when foraging cattails: [ChatGPT]

- Ensure you have the landowner's permission to forage, as cattails may grow on private property or protected areas. [ChatGPT]
- Only harvest from clean and unpolluted water sources to avoid contamination. [ChatGPT]
- Avoid over-harvesting and take only what you need, allowing the plants to continue growing and reproducing. [ChatGPT]

It's always a good idea to consult local foraging guides or experts to learn about any specific considerations or regulations regarding cattail foraging in your area. [ChatGPT]

pine needle

“pine needle tea is a great source of vitamin C” —[Noelle Dickinson](#)

“adding in to the pine needle bit, primarily you want to work with white pine (*Pinus strobus*), especially fresh light green needles that have been less exposed to pollutants (further from roads, if you can). google identification, but a quick way is long needles in bundles of 5.” —[mutt](#)

wild lettuce

[“Lawn lettuce, Google it, works in salads and has natural pain relief effects”](#)

—[@Jammedtomb](#)

“lawn lettuce is also known as wild lettuce (*Lactuca* spp.) and has anodyne and hypnotic effects AKA it helps the hurty and puts you to SLEEP. a great medicine for the working class. good in salads. also look into miner’s lettuce, different but yummy in salads! same with chickweed.” —[Mutt](#)

wild hostas

“Hostas are entirely edible and in the asparagus family.” —[Amy Bradstreet](#)

“Hostas.” —[Amy Bradstreet](#) reference to [Hungry for Hostas](#)

wild chickweed

“Chickweed makes delicious pesto with garlic, oil, and a bit of lemon.” —[Michelle McNeill](#)

“chickweed leaves are thinner [than purslane] and it has tiny white flowers. You can eat it as greens, too. Purslane is also tasty, though” —[Michelle McNeill](#)

“There’s a lookalike, scarlet pimpernel, that has reddish orange flowers that is not food, so if you haven’t seen it in a spot before and/or aren’t sure what it is that you are looking for, wait for the white flowers and you can be confident of your id.” —[Michelle McNeill](#)

wild knotweed

“This is what reciprocity looks like! Gathered a TON of knotweed shoots from my fave creek bank so the native plants stand a chance!” —[Alexis Nikole Nelson](#)

wild fruit

“Generally speaking, it’s about to be “wild” fruit season. You’d be surprised how many fruit trees are in your neighborhood. Sometimes, someone might not want you to pick their fruit. If you’re hungry, do it anyway, but be sneaky. Fallingfruit.org is your friend.” —[Soup](#)

“Blackberries show up around June in abandoned lots, hiking trails, and parks. Don’t eat anything that might be sprayed. Any tree that had white or pink blossoms in the spring might be an apple, cherry, or plum tree, so keep an eye out for ripe fruit mid/end of summer.” —[Soup](#)

wild blackberries

When I was a young child, there were wild blackberries growing on both sides of the dirt road that led to my great grandmother’s house.

My sisters would pick a few blackberries and eat them. My great grandmother (Honey) would give me a large basket or bowl and I would spend hours picking all the blackberries that were ripe.

My great grandmother would make a fantastic blackberry cobbler out of what I collected. Sometimes my grandfather would hand crank some vanilla ice cream to go with the blackberry cobbler. Sometimes my Aunt Kathy would provide ice cold 7-Up (7-Up was one of her favorites).

One year I brought a handful of blackberries home with me. After we got home, I tossed them onto side of the the hill behind the house. I told my father what I did. He said I wasted them and the birds would eat them. The next year, there were some blackberry plants. Turned out that I didn’t waste them. Every year the portion of the hill covered with blackberries got bigger. Later I tried tossing out blueberries, raspberries, and strawberries. The blueberries worked, but not the raspberries or strawberries. The blackberries dominated the hillside.

Foraging wild blackberries can be a delightful experience, as these delicious berries grow abundantly in many regions. Here’s a step-by-step guide on how to forage wild blackberries: [ChatGPT]

1. Identify the plant: Wild blackberries (*Rubus* spp.) typically grow on thorny shrubs with trailing or arching canes. They have serrated leaves and produce clusters of small white flowers that develop into juicy blackberries when ripe. Familiarize yourself with the appearance of blackberry plants to ensure you’re picking the right fruit. [ChatGPT]
2. Choose the right time: Blackberries generally ripen in the summer months, but the exact timing can vary based on your location and climate. Look for berries that are fully black and plump, indicating their readiness for picking. Ripe blackberries are easily separated from the plant with a gentle tug. [ChatGPT]

3. Find suitable locations: Wild blackberries can be found in various habitats, including open fields, forest edges, along trails, or even in urban areas with abandoned lots. Look for areas with ample sunlight and healthy vegetation, as these conditions promote the growth of flavorful berries. [ChatGPT]
4. Dress appropriately: When foraging blackberries, it's wise to wear long sleeves, long pants, and closed-toe shoes to protect yourself from thorns and potential irritants in the surrounding environment. [ChatGPT]
5. Bring the right tools: It's helpful to carry a few essential tools for foraging wild blackberries. Bring a basket, bucket, or another container to hold the berries you collect. Additionally, consider bringing gloves, pruning shears, or handheld clippers to navigate through thorny branches and make it easier to reach the berries. [ChatGPT]
6. Harvest the berries: Look for clusters of ripe blackberries and carefully pick them by gently pulling on the berry, aiming to keep the stem intact. Avoid forcefully yanking or squishing the berries. Be cautious of thorns and nettles while reaching for the berries, and try to minimize damage to the plant. [ChatGPT]
7. Sort and clean the berries: Once you have gathered your blackberries, sort through them to remove any damaged or overripe ones. Rinse the berries gently under cool water to remove any dirt, insects, or debris. Pat them dry with a towel or let them air dry. [ChatGPT]
8. Enjoy the blackberries: Wild blackberries are incredibly versatile and can be enjoyed in various ways. Eat them fresh as a healthy snack, use them in baking recipes such as pies, cobblers, or jams, or freeze them for later use in smoothies or desserts. [ChatGPT]

Remember the following tips when foraging wild blackberries: [ChatGPT]

- Respect the environment and only forage in areas where it is legal and permitted. [ChatGPT]
- Be mindful of potential hazards, such as poisonous plants or wildlife that may inhabit the same areas as blackberry bushes. [ChatGPT]
- Avoid areas that may have been sprayed with pesticides or chemicals. [ChatGPT]
- Take care not to overharvest, ensuring that there are plenty of berries left for wildlife and future foragers. [ChatGPT]

Foraging wild blackberries can be a delightful and rewarding experience, providing you with a taste of nature's bounty. Enjoy the process and savor the delicious fruits you collect! [ChatGPT]

wild raspberries

Foraging wild raspberries is a delightful experience, as these sweet and tangy berries grow abundantly in many regions. Here's a step-by-step guide on how to forage wild raspberries: [ChatGPT]

1. Identify the plant: Wild raspberries (*Rubus* spp.) are typically small to medium-sized shrubs with thorny stems. They have compound leaves with three to five leaflets and produce clusters of small white flowers that develop into berries when ripe. Familiarize

yourself with the appearance of raspberry plants to ensure you're picking the right fruit.

[ChatGPT]

2. Choose the right time: Wild raspberries generally ripen in the summer months, but the exact timing can vary based on your location and climate. Look for berries that are fully colored, plump, and easily detach from the plant when lightly tugged. Ripe raspberries should easily come off the core without much effort. [ChatGPT]
3. Find suitable locations: Wild raspberries can be found in a variety of habitats, including open fields, forest edges, along trails, or even in your backyard if you're fortunate. Look for areas with ample sunlight and healthy vegetation, as these conditions promote the growth of flavorful berries. [ChatGPT]
4. Dress appropriately: When foraging raspberries, it's wise to wear long sleeves, long pants, and closed-toe shoes to protect yourself from thorns and potential irritants in the surrounding environment. [ChatGPT]
5. Bring the right tools: It's helpful to carry a few essential tools for foraging wild raspberries. Bring a basket, bucket, or another container to hold the berries you collect. Additionally, consider bringing gloves to protect your hands from thorns and nettles. [ChatGPT]
6. Harvest the berries: Look for clusters of ripe raspberries and carefully pick them by gently pulling on the berry, aiming to keep the core intact. Raspberries are delicate, so handle them with care to avoid squishing or damaging the fruit. Be mindful of thorns while reaching for the berries and try to minimize damage to the plant. [ChatGPT]
7. Sort and clean the berries: Once you have gathered your raspberries, sort through them to remove any damaged or overripe ones. Avoid washing raspberries until just before you're ready to consume them, as excess moisture can lead to spoilage. When ready to wash, rinse the berries gently under cool water to remove any dirt, insects, or debris. Pat them dry with a towel or let them air dry. [ChatGPT]
8. Enjoy the raspberries: Wild raspberries are delicious when eaten fresh or can be used in a variety of culinary creations. Enjoy them on their own as a refreshing snack, incorporate them into salads, yogurt, or cereal, or use them in baking recipes such as pies, tarts, or preserves. [ChatGPT]

Remember the following tips when foraging wild raspberries: [ChatGPT]

- Respect the environment and only forage in areas where it is legal and permitted. [ChatGPT]
- Be mindful of potential hazards, such as poisonous plants or wildlife that may inhabit the same areas as raspberry bushes. [ChatGPT]
- Avoid areas that may have been sprayed with pesticides or chemicals. [ChatGPT]
- Take care not to overharvest, ensuring that there are plenty of berries left for wildlife and future foragers. [ChatGPT]

Foraging wild raspberries allows you to enjoy the natural bounty and flavors of these delicious berries. Take your time, savor the experience, and relish the sweet rewards of your foraging adventure! [ChatGPT]

thimbleberries

Foraging thimbleberries (*Rubus parviflorus*) can be a delightful experience, as these sweet and delicate berries grow in various regions. Thimbleberries are fragile and do not store well, so it's best to consume them fresh or use them immediately in recipes. Here's a step-by-step guide on how to forage thimbleberries: [ChatGPT]

1. Identify the plant: Thimbleberry plants are typically large, deciduous shrubs with broad, soft, and fuzzy leaves that resemble maple leaves. The flowers are white or pale pink and have five petals. The berries are soft, red to orange-red, and resemble miniature thimbles. [ChatGPT]
2. Choose the right time: Thimbleberries typically ripen in mid to late summer. Look for berries that are fully colored, plump, and easily detach from the plant when lightly touched. Ripe thimbleberries should come off the core with minimal effort. [ChatGPT]
3. Find suitable locations: Thimbleberries are often found in moist, wooded areas such as forests, meadows, or along stream banks. They prefer partial shade and moist soil conditions. Look for areas with lush vegetation and signs of thimbleberry plants, such as their distinctive large, soft leaves. [ChatGPT]
4. Dress appropriately: When foraging thimbleberries, it's advisable to wear long sleeves, long pants, and closed-toe shoes to protect yourself from potential irritants and insects in the surrounding environment. [ChatGPT]
5. Bring the right tools: Thimbleberries are delicate and easily damaged, so it's best to pick them by hand. Bring a container, such as a basket or shallow bowl, to hold the berries gently without crushing them. Avoid using gloves as they may further damage the fragile berries. [ChatGPT]
6. Harvest the berries: Look for ripe thimbleberries on the plant and gently pick them by using your fingers to grasp the berry near its base and gently twisting or pulling. Thimbleberries are delicate and can crush easily, so handle them with care. [ChatGPT]
7. Sort and clean the berries: Once you have gathered your thimbleberries, sort through them to remove any damaged or overripe ones. Rinse the berries gently under cool water to remove any dirt, insects, or debris. Pat them dry with a towel or let them air dry. [ChatGPT]
8. Enjoy the thimbleberries: Thimbleberries are best enjoyed fresh due to their delicate nature. Eat them as a sweet and tangy snack or use them immediately in recipes. Thimbleberries can be used in jams, jellies, syrups, sauces, desserts, or added to smoothies. [ChatGPT]

Remember the following tips when foraging thimbleberries: [ChatGPT]

- Respect the environment and only forage in areas where it is legal and permitted. [ChatGPT]
- Be mindful of potential hazards, such as poisonous plants or wildlife that may inhabit the same areas as thimbleberry shrubs. [ChatGPT]
- Avoid areas that may have been sprayed with pesticides or chemicals. [ChatGPT]
- Thimbleberries are fragile and do not keep well, so plan to consume or use them soon

after harvesting. [ChatGPT]

Foraging thimbleberries can be a delightful and rewarding experience, allowing you to savor the unique flavors of these delicate berries. Take your time, appreciate the natural surroundings, and enjoy the sweet rewards of your foraging adventure! [ChatGPT]

wild apples

Foraging wild apples can be a rewarding way to enjoy the flavors of wild fruit. Here's a step-by-step guide on how to forage wild apples: [ChatGPT]

1. Identify apple trees: Familiarize yourself with the characteristics of apple trees. Look for deciduous trees with broad, ovate-shaped leaves and often thorny branches. Apple trees may vary in size and shape, but they typically have a recognizable apple shape to their fruit. [ChatGPT]
2. Know the right season: Apples generally ripen in late summer to fall, depending on the variety and your location. Look for apples that have reached their mature color, which can range from green to red or yellow, depending on the variety. [ChatGPT]
3. Locate wild apple trees: Wild apple trees can be found in various habitats, including fields, forests, and along roadsides. Keep an eye out for trees that display apple fruits. It's worth noting that not all apple trees in the wild may produce tasty or desirable fruit, as some wild apples can be quite tart or small. [ChatGPT]
4. Obtain permission if necessary: If you plan to forage on private property or in protected areas, it's important to seek permission from the landowner or relevant authorities. [ChatGPT]
5. Assess the quality: Examine the apples for signs of ripeness and quality. Look for firm apples without blemishes, mold, or insect damage. While some blemishes are acceptable, avoid apples that appear severely damaged or rotten. [ChatGPT]
6. Harvest the apples: Gently twist or lift the apple to see if it releases easily from the branch. Use your hands to pick the apples or, if necessary, bring a small fruit-picking tool or pruners for hard-to-reach apples. Handle the apples with care to prevent bruising or damage. [ChatGPT]
7. Sort and clean the apples: After gathering the apples, sort through them to remove any damaged or spoiled fruit. Rinse the apples with water to remove dirt, dust, or debris. Use a soft cloth or towel to gently dry them. [ChatGPT]
8. Store or use the apples: If you plan to consume the apples immediately, store them in a cool, dry place until you're ready to enjoy them. If you have an abundance of apples, consider making applesauce, pies, or other apple-based dishes. Apples can also be stored for longer periods by wrapping them individually in newspaper and storing them in a cool, dark place. [ChatGPT]

Remember these important tips when foraging wild apples: [ChatGPT]

- Be respectful of private property and obtain permission if necessary. [ChatGPT]

- If you're uncertain about the identification of an apple tree or its fruit, consult with a knowledgeable local expert or guidebook. [ChatGPT]
- Take only what you need and be mindful of leaving enough apples for wildlife and other foragers. [ChatGPT]
- Avoid harvesting apples from areas that may have been sprayed with pesticides or chemicals. [ChatGPT]

Foraging wild apples can offer a delightful opportunity to experience the flavors of nature. Enjoy the process, experiment with different apple varieties, and savor the delicious rewards of your foraging adventure! [ChatGPT]

wild plums

Foraging wild plums can be a delicious and rewarding experience. Wild plums (*Prunus* spp.) are small, flavorful fruits that grow in various regions. Here's a step-by-step guide on how to forage wild plums: [ChatGPT]

1. Identify the tree: Familiarize yourself with the characteristics of wild plum trees. They are typically small to medium-sized deciduous trees with simple, serrated leaves. The trees may have white or pink flowers in the spring, which develop into plums later in the season. The color of the plums can vary, ranging from red to yellow or purple. [ChatGPT]
2. Know the right season: Wild plums generally ripen in late summer to early fall, depending on the variety and your location. Look for plums that have reached their mature color and are slightly soft to the touch. Avoid plums that are underripe or overly soft and mushy. [ChatGPT]
3. Locate wild plum trees: Wild plum trees can be found in various habitats, such as woodlands, hedgerows, along streams, or in open fields. Look for areas where you spot wild plum trees or ask local foragers or farmers for tips on where to find them. [ChatGPT]
4. Obtain permission if necessary: If you plan to forage on private property or in protected areas, it's important to seek permission from the landowner or relevant authorities. [ChatGPT]
5. Assess the quality: Examine the plums for signs of ripeness and quality. Look for plums that are firm, plump, and have a vibrant color. Avoid plums that have bruises, insect damage, or signs of rot. [ChatGPT]
6. Harvest the plums: Gently twist or lift the plums to see if they release easily from the branch. Use your hands to pick the plums or, if necessary, bring a small fruit-picking tool or pruners for hard-to-reach plums. Handle the plums with care to prevent bruising or damage. [ChatGPT]
7. Sort and clean the plums: After gathering the plums, sort through them to remove any damaged or spoiled fruit. Rinse the plums with water to remove dirt, dust, or debris. Use a soft cloth or towel to gently dry them. [ChatGPT]
8. Store or use the plums: If you plan to consume the plums immediately, store them in a cool, dry place until you're ready to enjoy them. If you have an abundance of plums, consider making jams, jellies, pies, or other plum-based dishes. Plums can also be stored for

a short period in the refrigerator or preserved through canning or freezing for longer-term storage. [ChatGPT]

Remember these important tips when foraging wild plums: [ChatGPT]

- Be respectful of private property and obtain permission if necessary. [ChatGPT]
- If you're uncertain about the identification of a wild plum tree or its fruit, consult with a knowledgeable local expert or guidebook. [ChatGPT]
- Take only what you need and be mindful of leaving enough plums for wildlife and other foragers. [ChatGPT]
- Avoid harvesting plums from areas that may have been sprayed with pesticides or chemicals. [ChatGPT]

Foraging wild plums can provide a delightful opportunity to enjoy the flavors of nature. Enjoy the process, experiment with different plum varieties, and savor the delicious rewards of your foraging adventure! [ChatGPT]

wild pears

Foraging wild pears can be a rewarding way to enjoy the flavors of these delicious fruits. Wild pears (*Pyrus* spp.) are often smaller and more flavorful than cultivated varieties. Here's a step-by-step guide on how to forage wild pears: [ChatGPT]

1. Identify the tree: Familiarize yourself with the characteristics of wild pear trees. They are typically medium-sized deciduous trees with simple, elliptical leaves. The trees may have white or cream-colored flowers in the spring, which develop into pears later in the season. The shape and color of the pears can vary depending on the species. [ChatGPT]
2. Know the right season: Wild pears generally ripen in late summer to early fall, depending on the variety and your location. Look for pears that have a mature color and are slightly soft to the touch. Avoid pears that are still hard and underripe. [ChatGPT]
3. Locate wild pear trees: Wild pear trees can be found in various habitats, such as woodlands, open fields, or along forest edges. Look for areas where you spot wild pear trees or ask local foragers or farmers for tips on where to find them. [ChatGPT]
4. Obtain permission if necessary: If you plan to forage on private property or in protected areas, it's important to seek permission from the landowner or relevant authorities. [ChatGPT]
5. Assess the quality: Examine the pears for signs of ripeness and quality. Look for pears that are firm but yield slightly to gentle pressure. Avoid pears that have bruises, insect damage, or signs of rot. [ChatGPT]
6. Harvest the pears: Gently twist or lift the pears to see if they release easily from the branch. Use your hands to pick the pears or, if necessary, bring a small fruit-picking tool or pruners for hard-to-reach pears. Handle the pears with care to prevent bruising or damage. [ChatGPT]
7. Sort and clean the pears: After gathering the pears, sort through them to remove any

damaged or spoiled fruit. Rinse the pears with water to remove dirt, dust, or debris. Use a soft cloth or towel to gently dry them. [ChatGPT]

8. Ripen and store the pears: Unlike some fruits, wild pears may require a period of ripening off the tree to reach their full flavor. Place the pears in a cool, dry place at room temperature and allow them to ripen for a few days. Check them regularly for ripeness and consume them once they are soft and aromatic. [ChatGPT]

Remember these important tips when foraging wild pears: [ChatGPT]

- Be respectful of private property and obtain permission if necessary. [ChatGPT]
- If you're uncertain about the identification of a wild pear tree or its fruit, consult with a knowledgeable local expert or guidebook. [ChatGPT]
- Take only what you need and be mindful of leaving enough pears for wildlife and other foragers. [ChatGPT]
- Avoid harvesting pears from areas that may have been sprayed with pesticides or chemicals. [ChatGPT]

Foraging wild pears allows you to enjoy the flavors of nature's bounty. Enjoy the process, savor the delicious fruits, and explore various ways to use wild pears in your culinary endeavors! [ChatGPT]

wild elderberries

Foraging wild elderberries can be a rewarding experience, as these berries are not only delicious but also have several health benefits. Here's a step-by-step guide to help you forage wild elderberries safely: [ChatGPT]

1. Identify the elderberry bush: Elderberry bushes are deciduous shrubs that can grow up to 10 feet tall. They have compound leaves with 5 to 11 leaflets that are arranged opposite each other along the stem. The elderberry bush produces clusters of small, white flowers in the spring, which eventually turn into dark purple or black berries. [ChatGPT]
2. Choose the right time: Elderberries typically ripen in late summer or early fall, usually between August and September. The berries should be fully dark and ripe before harvesting. [ChatGPT]
3. Find a suitable location: Look for elderberry bushes in areas such as woodland edges, riverbanks, or open fields. They prefer moist soil and sunlight, so you're likely to find them near water sources. [ChatGPT]
4. Ensure proper identification: While elderberries are generally safe to consume, it's important to be certain about their identification to avoid any confusion with similar-looking toxic plants. Use reliable field guides or consult with an experienced forager or botanist who can help you identify elderberry bushes correctly. [ChatGPT]
5. Harvesting the elderberries: Put on gloves and long sleeves to protect yourself from thorns and scratches. Use a pair of sharp scissors or pruning shears to cut the entire cluster of ripe berries from the stem. You can also gently shake the clusters to dislodge the ripe

berries into a container. [ChatGPT]

6. Check for ripeness: Elderberries should be fully dark and plump when ripe. Avoid picking unripe green berries or ones that are still red, as they may be toxic and cause digestive issues. [ChatGPT]
7. Remove any green stems or leaves: Once you have harvested the elderberry clusters, take them home and sort through them. Remove any green stems or leaves, as they can be mildly toxic. Be thorough in this process to ensure you only keep the ripe berries. [ChatGPT]
8. Clean and prepare the berries: Wash the elderberries thoroughly in a colander under cool running water. Remove any debris, insects, or unripe berries that may still be present. Allow the berries to drain and air dry. [ChatGPT]
9. Preservation or immediate use: You can use the elderberries fresh, or you can preserve them for later use. Common preservation methods include freezing, drying, or making elderberry syrup or jam. Follow specific preservation instructions for each method. [ChatGPT]

Remember, if you're uncertain about the identification of a plant or have any doubts about its safety, it's best to seek guidance from experts or avoid consuming it altogether. Enjoy your foraging experience and the tasty elderberries you find! [ChatGPT]

wild grapes

Foraging wild grapes can be a delightful way to enjoy the flavors of nature. Here's a step-by-step guide to help you forage wild grapes: [ChatGPT]

1. Identify the grapevine: Wild grapes grow on vines that can climb trees or trail along the ground. Look for grapevines with large, heart-shaped leaves that are serrated at the edges. The leaves are typically green but may turn red or yellow in the fall. Wild grapevines may have clusters of small, unripe grapes hanging from them. [ChatGPT]
2. Choose the right time: Wild grapes usually ripen in late summer or early fall, typically between August and September. The grapes should be plump, juicy, and have a deep color when they're ready for harvest. [ChatGPT]
3. Find a suitable location: Wild grapevines can be found in a variety of habitats, including forests, edges of fields, along riverbanks, or climbing trees. Look for areas with plenty of sunlight and adequate moisture. [ChatGPT]
4. Ensure proper identification: It's crucial to correctly identify wild grapes to avoid confusion with poisonous look-alike plants. Familiarize yourself with the characteristics of the grapevine and its fruit, or consult with a knowledgeable forager or botanist to confirm your identification. [ChatGPT]
5. Harvesting the grapes: Put on gloves to protect your hands from scratches and cuts. Use a pair of garden pruners or scissors to cut the grape clusters from the vine. Carefully handle the clusters to avoid damaging the grapes or the vine. You can also gently twist the clusters off the vine if they come off easily. [ChatGPT]
6. Check for ripeness: Ensure the grapes are fully ripe before harvesting. Ripe wild grapes will have a rich color, usually dark purple or black for most varieties. They should feel

slightly soft when gently squeezed and come off the vine with ease. [ChatGPT]

7. Remove any debris: Once you've collected the grape clusters, inspect them to remove any leaves, stems, or insects that may be present. [ChatGPT]
8. Clean the grapes: Rinse the grapes gently under cool running water to remove any dirt or debris. Be careful not to crush the grapes during this process. Allow them to air dry or gently pat them dry with a clean towel. [ChatGPT]
9. Enjoy or preserve the grapes: You can consume the wild grapes immediately or use them in various culinary preparations. They're delicious on their own, in salads, or in recipes such as jellies, jams, or pies. If you have an abundance of grapes, you can also freeze them for later use. [ChatGPT]

Remember, foraging should always be done responsibly and ethically. Respect the environment and only harvest what you need, leaving enough for wildlife and future foragers. Enjoy the experience of foraging wild grapes and savor their natural goodness! [ChatGPT]

wild strawberries

My friend Annie was planning on picking strawberries this weekend (last weekend of May 2023). Unfortunately it is going to rain in Virginia Beach, so she won't be able to go strawberry picking. She only has one pair of shoes and doesn't want them to get muddy.

Foraging wild strawberries can be a delightful experience, as these small berries pack a lot of flavor. Here's a step-by-step guide to help you forage wild strawberries: [ChatGPT]

1. Identify the wild strawberry plant: Wild strawberries, also known as woodland strawberries or alpine strawberries, have distinct characteristics. Look for low-growing plants with trifoliate leaves, meaning each plant has three leaflets. The leaves are typically toothed or serrated along the edges. Wild strawberry plants produce small white flowers, followed by tiny red berries. [ChatGPT]
2. Choose the right time: Wild strawberries usually ripen in late spring or early summer, typically between May and July, depending on your location. The berries should be fully red and plump before harvesting. [ChatGPT]
3. Find a suitable location: Wild strawberries can be found in various habitats, including meadows, forests, woodland edges, and even in your own backyard. Look for areas with well-drained soil, sunlight, and a moderate amount of moisture. [ChatGPT]
4. Ensure proper identification: It's important to correctly identify wild strawberries to avoid confusion with other plants or potentially toxic berries. Familiarize yourself with the characteristics of wild strawberry plants or consult with a knowledgeable forager or botanist for confirmation. [ChatGPT]
5. Harvesting the strawberries: Put on gloves to protect your hands from scratches and cuts. Use your fingers or small garden scissors to pick the wild strawberries, gently plucking them from the stems. Be careful not to damage the delicate plants or other developing berries. [ChatGPT]
6. Check for ripeness: Ensure the wild strawberries are fully ripe before harvesting. Ripe

strawberries will be uniformly red, have a sweet aroma, and feel soft to the touch. Avoid picking strawberries that are still partially white or green, as they may not have developed their full flavor. [ChatGPT]

7. Collect the berries: Place the harvested wild strawberries in a clean container, such as a basket or a breathable bag. Avoid using plastic bags or containers that may trap moisture and cause the berries to spoil quickly. [ChatGPT]
8. Clean and enjoy the strawberries: Once you've gathered the wild strawberries, give them a gentle rinse under cool running water to remove any dirt or debris. Allow them to air dry or gently pat them dry with a clean towel. Enjoy the wild strawberries immediately, as their delicate nature makes them best when consumed fresh. [ChatGPT]

Remember, wild strawberries are small, so it may take some time to gather a substantial quantity. Take care not to disturb the plants or damage the surrounding environment while foraging. Enjoy the wonderful taste of these little treasures of nature! [ChatGPT]

wild nuts

“In fall, you'll find productive walnut and chestnut trees if you're observant. They both require processing but can be a good source of protein when you aren't getting meat.” —[Soup](#)

wild maple

“The inside of Maple tree seeds (those little “helicopter seeds” are edible as well and are easily foraged. They are a great source of zinc” —[@DenverJOfficial](#)

red valerian

Red valerian comes from the rocky coastlines of the Mediterranean, so look for it in old stone walls.

Red valerian (*Centranthus ruber*) is a lovely flowering plant that can be foraged for its vibrant blossoms. Here's a step-by-step guide to help you forage red valerian: [ChatGPT]

1. Identify the red valerian plant: Red valerian is a perennial herbaceous plant with clusters of small, fragrant flowers. The flowers are typically red, pink, or white and grow on tall stems with narrow, lance-shaped leaves. Red valerian is commonly found in rocky or coastal areas, walls, and disturbed habitats. [ChatGPT]
2. Choose the right time: Red valerian typically blooms from late spring to early summer, usually between May and July. The flowers are most abundant during this period, making it the ideal time for foraging. [ChatGPT]
3. Find a suitable location: Look for red valerian in rocky areas, coastal cliffs, old walls, or

other similar habitats. They are often found in sunny locations with well-drained soil.

[ChatGPT]

4. Ensure proper identification: Familiarize yourself with the characteristics of red valerian to ensure correct identification. Pay attention to the flower color, shape, and leaf structure. If you're unsure, consult a reliable field guide or seek the guidance of an experienced forager or botanist. [ChatGPT]
5. Harvesting the red valerian flowers: When foraging red valerian, it's best to harvest the flowers rather than the entire plant. Bring a pair of small pruning shears or sharp scissors to cut the stems just below the flower clusters. Select stems with fully bloomed flowers for the best color and fragrance. [ChatGPT]
6. Check for readiness: Choose flowers that are fully open and vibrant. Avoid harvesting flowers that are wilted or faded in color, as they may not have the same freshness or aroma. [ChatGPT]
7. Collect the flowers: Place the harvested red valerian flowers in a breathable bag or basket to allow air circulation and prevent them from becoming crushed or wilted. [ChatGPT]
8. Handle with care: Red valerian flowers are delicate, so take care to avoid bruising or damaging them during transportation. Keep them in a cool and shaded place, if possible, until you can process them further. [ChatGPT]
9. Enjoy or preserve the flowers: Red valerian flowers have a pleasant fragrance and can be used in various ways. You can use them fresh in floral arrangements, potpourri, or even as edible decorations for salads and desserts. If you wish to preserve them, you can dry the flowers by hanging them upside down in a well-ventilated area away from direct sunlight. Once dried, store them in an airtight container in a cool, dark place for future use. [ChatGPT]

Always ensure you have permission to forage on private land, and be mindful of any regulations or conservation practices in your area. Enjoy the beauty and fragrance of red valerian while respecting the natural environment! [ChatGPT]

wild hops

Foraging wild hops can be a rewarding endeavor, especially if you're interested in brewing your own beer or making herbal preparations. Here's a step-by-step guide to help you forage wild hops: [ChatGPT]

1. Identify the hop plant: Hops are perennial climbing plants with vigorous growth. They have heart-shaped leaves with serrated edges and produce cone-like flowers called hop cones. Hop plants are dioecious, meaning male and female flowers grow on separate plants. Female hop plants are the ones that produce the cones. [ChatGPT]
2. Choose the right time: Wild hops are typically ready for harvest in late summer or early fall, usually between August and September. The hop cones should be mature, firm, and aromatic when touched. [ChatGPT]
3. Find a suitable location: Wild hops can often be found near water sources, along riverbanks, or in areas with moist soil and plenty of sunlight. Look for tall vines climbing trees, fences, or other structures. [ChatGPT]

4. Ensure proper identification: Correctly identifying the hop plant is crucial to avoid confusing it with similar-looking plants or toxic species. Familiarize yourself with the characteristics of hop plants or consult with experienced foragers or botanists to confirm your identification. [ChatGPT]
5. Harvesting the hop cones: Put on gloves and long sleeves to protect yourself from the prickly hop vines. Use pruning shears or scissors to cut the hop cones from the vine, ideally leaving a few inches of stem attached to each cone. Harvest the cones that feel papery to the touch and have a strong, pleasant aroma. [ChatGPT]
6. Remove any debris: Once you've collected the hop cones, inspect them to remove any leaves, stems, or insects that may be present. Be thorough in this process to ensure you only keep the hop cones. [ChatGPT]
7. Dry the hop cones: After harvesting, hop cones need to be properly dried before use. Spread them out in a single layer on a clean, dry surface, such as a screen or a baking sheet. Place them in a well-ventilated area away from direct sunlight and moisture. Stir or flip the cones daily to ensure even drying. They are ready when the cones feel dry, slightly papery, and the lupulin (yellow powder inside the cones) is powdery and fragrant. Drying can take about a week or longer, depending on the environmental conditions. [ChatGPT]
8. Store the dried hop cones: Once the hop cones are fully dried, store them in an airtight container, such as a jar or a vacuum-sealed bag, in a cool, dark place. Properly stored hop cones can retain their flavor and aroma for several months to a year. [ChatGPT]

Wild hops can be used for brewing beer, making herbal infusions, or adding flavor and aroma to various culinary creations. Remember to always obtain permission before foraging on private property and respect any local regulations regarding wild plant collection. Enjoy the unique qualities of wild hops in your homemade brews or other creative endeavors! [ChatGPT]

wild honeysuckle

Foraging honeysuckle can be an enjoyable and rewarding experience. Honeysuckle plants produce fragrant and sweet-tasting flowers that can be used in various culinary and medicinal preparations. Here's a step-by-step guide on how to forage honeysuckle: [ChatGPT]

1. Identify the plant: Honeysuckle plants belong to the Caprifoliaceae family and are characterized by their twining vines, opposite leaves, and clusters of tubular flowers. There are several species of honeysuckle, but the most common ones used for foraging include Japanese honeysuckle (*Lonicera japonica*) and European honeysuckle (*Lonicera periclymenum*). [ChatGPT]
2. Choose the right location: Honeysuckle plants can be found in a variety of habitats, including woodlands, fields, hedgerows, and garden edges. Look for areas where honeysuckle is known to grow abundantly and is not exposed to pollution or heavy pesticide use. [ChatGPT]
3. Timing: Honeysuckle flowers are typically in bloom during the summer months, from May to July, depending on your location. For the best flavor and aroma, choose flowers that have fully opened and are at their peak. [ChatGPT]

4. **Harvesting:** When harvesting honeysuckle, it's essential to only pick the flowers and avoid the leaves and berries, as they can be toxic or unpalatable. Gently pluck the flowers from the stem, being careful not to damage the plant. You can collect them in a basket or a breathable bag. [ChatGPT]
5. **Check for identification:** Although honeysuckle flowers are generally safe to eat, it's crucial to ensure you have correctly identified the plant and are not mistaking it for a toxic variety. If you're uncertain about the plant's identification, it's best to consult a local expert or guidebook. [ChatGPT]
6. **Cleaning:** Once you've gathered the honeysuckle flowers, give them a thorough rinse under cool running water to remove any dirt, insects, or debris that may be present. It's a good practice to inspect the flowers again after rinsing to make sure they're clean. [ChatGPT]
7. **Uses:** Foraged honeysuckle flowers can be used in various ways. You can infuse them in hot water to make a flavorful and aromatic tea, incorporate them into baked goods or desserts, or use them to make syrups, jams, or infused oils. Experiment with different recipes and preparations to explore the unique flavors and fragrances of honeysuckle. [ChatGPT]

Remember to be respectful of the environment while foraging and to only harvest from areas where it's allowed and sustainable. Avoid over-harvesting and leave enough flowers for the plant to reproduce and support wildlife. Enjoy the process of foraging honeysuckle and discovering the delightful flavors it has to offer! [ChatGPT]

ivy-leaved toadflax

Foraging ivy-leaved toadflax (*Cymbalaria muralis*) can be a fun way to explore wild edible plants. Also known as Kenilworth ivy, this herbaceous plant is often found growing in rocky or shady areas. Here's a step-by-step guide on how to forage ivy-leaved toadflax: [ChatGPT]

1. **Identify the plant:** Ivy-leaved toadflax has distinctive heart-shaped leaves with scalloped edges and small, snapdragon-like flowers. The flowers can range in color from purple and violet to pink or white. Familiarize yourself with the plant's characteristics using a reliable field guide or by consulting with a local expert. [ChatGPT]
2. **Choose the right location:** Ivy-leaved toadflax is typically found growing on walls, rocks, or in crevices in urban or rural environments. Look for areas with old stone walls, rocky slopes, or abandoned buildings where the plant is known to thrive. Take note of any potential pollution or pesticide use in the area to ensure the plants are safe to consume. [ChatGPT]
3. **Timing:** Ivy-leaved toadflax flowers throughout the summer, usually from May to September, depending on your location. For the best taste and quality, harvest the plant when it's in full bloom, and the flowers are fresh and vibrant. [ChatGPT]
4. **Harvesting:** Toadflax can be harvested by gently plucking the flowering stems from the plant. It's best to use your fingers or small scissors to avoid damaging the plant or surrounding vegetation. You can collect the stems with flowers in a basket or a breathable bag. [ChatGPT]

5. **Cleaning:** Once you've gathered the ivy-leaved toadflax, it's important to clean it thoroughly to remove any dirt, insects, or debris. Rinse the stems and flowers under cool running water, being careful not to damage them. [ChatGPT]
6. **Culinary uses:** Ivy-leaved toadflax is edible and has a slightly bitter taste. The flowers can be used as a decorative garnish for salads, desserts, or drinks. They can also be added to soups, stews, or herbal teas to infuse a mild flavor. Experiment with small amounts to see how the taste suits your palate. [ChatGPT]
7. **Precautions:** While ivy-leaved toadflax is generally considered safe for consumption, it's important to be cautious and avoid harvesting from areas that may be contaminated with pollutants or chemicals. Additionally, if you have allergies or sensitivities to plants in the Plantaginaceae family, it's best to avoid consuming ivy-leaved toadflax. [ChatGPT]

Always practice sustainable foraging by harvesting in moderation and leaving enough plants to regenerate and support wildlife. Respect private property and obtain permission before foraging on someone else's land. Enjoy the experience of foraging and exploring the culinary possibilities of ivy-leaved toadflax! [ChatGPT]

wild passionfruit

Foraging passionfruit can be a delightful experience, as these tropical fruits are known for their deliciously sweet and tangy flavor. Here's a step-by-step guide on how to forage passionfruit: [ChatGPT]

1. **Identify the plant:** Passionfruit vines belong to the Passiflora genus and are characterized by their unique flowers and round or oval-shaped fruits. The most commonly foraged variety is the purple passionfruit (*Passiflora edulis*). Familiarize yourself with the plant's appearance by studying pictures or consulting local resources to ensure accurate identification. [ChatGPT]
2. **Find the right location:** Passionfruit vines thrive in warm, tropical, and subtropical regions. Look for areas with a suitable climate, such as gardens, orchards, or even wild areas where passionfruit vines may have grown naturally. They often climb over fences, trellises, or other support structures. [ChatGPT]
3. **Timing:** Passionfruit typically ripens in late summer to early fall, depending on the specific variety and your location. The fruit should be fully ripe before harvesting to ensure the best flavor. Look for passionfruits that have turned a deep purple color and have a slightly wrinkled skin. [ChatGPT]
4. **Harvesting:** To harvest passionfruit, gently twist or cut the fruit from the vine using pruning shears or a sharp knife. It's important to handle the fruits with care to avoid damaging them. If the fruit doesn't come off easily, it may not be fully ripe, so it's best to wait a little longer before attempting to harvest it. [ChatGPT]
5. **Check for ripeness:** To determine if a passionfruit is ripe, give it a gentle squeeze. Ripe fruits should feel slightly soft but not overly mushy. The skin may have some wrinkles, which is normal. The fruit should also have a strong, sweet fragrance. [ChatGPT]
6. **Enjoying passionfruit:** Once you've harvested passionfruit, you can enjoy it fresh or use

it in various culinary preparations. To eat a passionfruit, cut it in half and scoop out the pulp and seeds with a spoon. The pulp can be eaten as is or used as a topping for desserts, added to smoothies, used in sauces or dressings, or incorporated into baked goods. [ChatGPT]

7. Growing from seeds: If you want to propagate passionfruit, you can save some of the seeds from the fruits you harvest. Rinse the seeds to remove any pulp, and allow them to dry for a few days. Plant the seeds in well-draining soil in pots or directly in the ground, and provide them with a warm and sunny location. Passionfruit plants require support structures to climb on as they grow. [ChatGPT]

Remember to respect private property and obtain permission before foraging passionfruit from someone else's land. If you're unsure about the safety or legality of foraging in a particular area, it's best to consult local regulations or seek permission from the landowner. Enjoy the delicious flavors of foraged passionfruit! [ChatGPT]

bittersweet

Foraging bittersweet can be a rewarding and enjoyable experience. Bittersweet is a woody vine that produces vibrant red or orange berries, which are often used for decorative purposes in crafts and floral arrangements. Here are some steps to help you forage bittersweet responsibly: [ChatGPT]

1. Research and identify the plant: Familiarize yourself with the appearance and characteristics of bittersweet. There are two types commonly found: American bittersweet (*Celastrus scandens*) and Oriental bittersweet (*Celastrus orbiculatus*). Learn to differentiate between them, as Oriental bittersweet is considered an invasive species in some regions. [ChatGPT]
2. Know the season: Bittersweet berries typically ripen and become more prominent in the fall, from September to November. Plan your foraging expedition during this time to increase your chances of finding mature berries. [ChatGPT]
3. Seek appropriate locations: Look for bittersweet vines in wooded areas, forest edges, and along the borders of fields. They often climb and intertwine with trees and shrubs, so keep an eye out for their distinctive vines. [ChatGPT]
4. Obtain permission: If you plan to forage on private property or in protected areas, always seek permission from the landowner or relevant authorities. Respect any regulations or restrictions in place. [ChatGPT]
5. Harvest responsibly: When collecting bittersweet berries, it's crucial to be mindful of the plant's conservation and the environment. Follow these guidelines: [ChatGPT]
 - Harvest selectively: Only gather a small portion of the available berries, leaving enough for the plant's survival and wildlife consumption. [ChatGPT]
 - Avoid damaging the vine: Carefully cut the berry clusters with pruning shears or sharp scissors, leaving the rest of the plant intact. [ChatGPT]
 - Prevent spreading invasive species: If you come across Oriental bittersweet, be cautious not to spread its seeds inadvertently. This species can negatively impact native vegetation. Dispose of any Oriental bittersweet plants responsibly and separate

them from American bittersweet. [ChatGPT]

6. Proper handling and storage: Bittersweet berries are toxic to humans and most animals, so it's important to handle them with care. Wear gloves while harvesting and avoid ingesting any parts of the plant. Store the harvested berries in a cool, dry place to allow them to dry and preserve their color for future use. [ChatGPT]

Remember, it's essential to forage responsibly, respecting the environment, and adhering to any local regulations or guidelines regarding the collection of wild plants. [ChatGPT]

old man's beard

Foraging "Old Man's Beard" (*Clematis vitalba*) can be a rewarding experience, as it has various uses in traditional medicine and craftwork. Here are some steps to help you forage this plant: [ChatGPT]

1. Identify the plant: Familiarize yourself with the appearance of *Clematis vitalba*. It is a climbing vine with long, feathery, white seed heads that resemble a beard or hair. The leaves are dark green and divided into leaflets. [ChatGPT]
2. Choose the right location: Old Man's Beard is native to Europe and can be found in many wooded areas, hedges, and along the edges of fields. Look for areas where this plant grows abundantly, but ensure that you have permission to forage there. [ChatGPT]
3. Timing: Harvest the plant during late summer or early autumn when the seed heads are fully formed. This is when they are most visible and mature for collection. [ChatGPT]
4. Tools and equipment: You'll need a pair of pruning shears or sharp scissors to cut the seed heads. It's also a good idea to bring a basket or bag to collect the foraged material. [ChatGPT]
5. Harvesting: Look for healthy plants with abundant seed heads. Cut the seed heads from the plant, leaving a few inches of stem attached. Avoid collecting damaged or diseased parts. [ChatGPT]
6. Drying: After collecting, you'll need to dry the seed heads to preserve them for later use. Place them in a well-ventilated area, away from direct sunlight. You can hang them upside down or spread them out on a drying rack or a clean cloth. Allow them to dry for a couple of weeks or until they feel completely dry and brittle. [ChatGPT]
7. Storage: Once the seed heads are thoroughly dried, store them in airtight containers such as glass jars or paper bags. Make sure to label the containers with the plant name and the date of collection. [ChatGPT]
8. Uses: Old Man's Beard has been traditionally used in herbal medicine to treat various ailments, such as coughs, bronchitis, and respiratory congestion. It can be brewed into a tea, tincture, or infused oil. The dried seed heads can also be used in craftwork, such as floral arrangements, wreaths, or decorative displays. [ChatGPT]

Remember to exercise caution and follow sustainable foraging practices. Only take what you need, leave enough for the plant to reproduce, and respect any local regulations or restrictions on foraging in your area. If you're uncertain about the identification or safety of a plant, consult with

a local expert or botanist. [ChatGPT]

wild dewberry

Foraging wild dewberries can be a fun and rewarding activity. Dewberries are similar to blackberries and grow on low, trailing vines in many parts of North America. Here's a step-by-step guide on how to forage wild dewberries: [ChatGPT]

1. Find the Right Location: Dewberries typically grow in sunny or partially shaded areas, such as open fields, meadows, or along the edges of forests. Look for areas with low, trailing vines and thorny stems. Dewberries are most commonly found in the eastern and southern parts of the United States. [ChatGPT]
2. Timing: The best time to forage dewberries is during their peak season, which varies depending on your location. In general, they ripen from late spring to early summer. Keep an eye out for the first signs of ripe fruit, such as a deep purplish-black color. [ChatGPT]
3. Identify Dewberry Plants: Dewberry plants have distinct features that help in their identification. The leaves are typically composed of five leaflets, arranged in a palm-like pattern. The stems are thorny and trail along the ground or low vegetation. The berries are small and dark, similar in appearance to blackberries. [ChatGPT]
4. Harvesting: To harvest dewberries, wear protective clothing such as long sleeves, pants, and gloves, as the thorny vines can be prickly. Gently lift the trailing vines to locate the ripe berries. Look for plump, fully black berries that are easily detached from the stem with a slight tug. Avoid berries that are under-ripe, as they may be tart and lacking in flavor. [ChatGPT]
5. Respect Nature: When foraging, it's essential to respect the environment and follow ethical guidelines. Only take what you need, leaving enough berries for wildlife and other foragers. Be mindful not to damage the plants or disturb the surrounding ecosystem. [ChatGPT]
6. Post-Harvest: Once you have harvested your dewberries, sort through them and discard any berries that are overripe, moldy, or damaged. Rinse the berries gently under cool water to remove any dirt or debris. You can enjoy them fresh, incorporate them into various recipes, or freeze them for later use. [ChatGPT]

Remember, it's important to have accurate knowledge of local plant species and any legal restrictions on foraging in your area. Some regions may require permits or have limitations on wild berry picking, so check the regulations before you head out. [ChatGPT]

stone bramble

Stone bramble, also known as stone fruit or stone raspberry (*Rubus saxatilis*), is a wild plant that belongs to the same genus as blackberries and raspberries. Here's a general guide on how to forage stone bramble: [ChatGPT]

1. Habitat and Season: Stone brambles are typically found in cool, temperate regions,

particularly in Europe. They tend to grow in rocky or stony areas, hence the name. Look for them in woodlands, hedgerows, or along the edges of fields. Stone brambles generally ripen from mid-summer to early autumn. [ChatGPT]

2. Identification: Familiarize yourself with the characteristics of stone bramble to ensure proper identification. The plant typically has trailing or arching stems with thorny branches. The leaves are palmately compound, with three or five leaflets that have toothed edges. The fruit resembles small raspberries, often orange or reddish-orange when ripe. [ChatGPT]
3. Harvesting: When you spot a stone bramble plant with ripe fruit, gently pluck the berries from the stem. The fruit should be firm, plump, and easily separated from the plant. Avoid picking unripe or overripe berries, as they may not have the best flavor or texture. [ChatGPT]
4. Safety Precautions: As with any foraging activity, it's important to exercise caution. Wear appropriate clothing, such as long sleeves, pants, and gloves, to protect yourself from thorns and other potential hazards. Be aware of your surroundings and avoid areas that may be contaminated by pollutants or pesticides. [ChatGPT]
5. Ethical Harvesting: Practice responsible foraging by only taking what you need and leaving some berries for wildlife and other foragers. Avoid damaging the plant or its environment while harvesting. By respecting nature, you help ensure the sustainability of the plant population. [ChatGPT]
6. Post-Harvest: Once you have gathered your stone brambles, inspect them for any damaged, moldy, or unripe berries. Rinse them gently under cool water to remove any dirt or debris. Stone brambles can be enjoyed fresh or used in various culinary preparations, such as jams, jellies, desserts, or added to smoothies. [ChatGPT]

Remember to consult reliable local sources or field guides specific to your region to obtain accurate information about stone bramble and its foraging practices. [ChatGPT]

My first attempt to get information on stone bramble from ChatGPT resulted in the following message (I got the above reply by providing the scientific name):

I apologize, but I couldn't find any information on a plant called "stone bramble" in my training data. It's possible that the term you're using may refer to a regional or colloquial name for a specific plant. If you could provide me with more details or a different name, I'll do my best to assist you with the information available to me. [ChatGPT]

bone-in chicken

"bone-in chicken, then cook the bones down until they're mushy - broth for soup, eat the bones (or give them to dogs - as long as they are MUSHY)" —[Noelle Dickinson](#)

Remember to always immediately wash your hands after touching raw chicken or eggs. Before touching anything else. To prevent cross-contamination.

other

See: debt ceiling effect on the poor

avocado toast

avocado toast

Avocado toast is nutritious, tasty, and easy to make. This is a great breakfast item for beginning cooks, including children. **#avotoast**

Avocado toast is an open face sandwich featuring mashed avocado, salt, black pepper, and citric juice on top of a single slice of toasted bread. Common additional toppings include poached eggs, salmon, strawberries, garlic, tomatoes, capers, onions, and feta.

Origin: Australia.

In late 2016, columnist Bernard Salt claimed in *The Australian* “young people order smashed avocado with crumbled feta on five-grain toasted bread at \$22 a pop and more” and stated that Millenials should be saving to purchase a house instead. In May 2017, property developer Tim Gurner repeated a similar claim. The savings from forgoing avocado on toast would take more than 500 years to save enough money to purchase a house in Ireland (longer for Northern Ireland).

Avocado toast is one of the items in the recommended breakfast foods list and is easy to prepare.

Making avocado toast requires minimal cooking skills:

1. the ability to make toast
2. the ability to cut open and slice an avocado
3. the ability to put the avocado on to the toast (and optionally mash it with a fork)

Avocado toast is among the healthiest approaches to bread or toast for breakfast.

Avocado, one of two signature ingredients, is about 75% healthy monounsaturated fats, along with fiber, vitamin C, vitamin B-6, potassium, magneum, and protein.

And the vast majority of the world's young in industrialized nations happen to thoroughly enjoy the taste, which will make this a popular breakfast item for at least the next several decades (unless humans break down the agricultural infrastructure, through things like nuclear winter or global climate change).

The classic avocado toast is simply toast (usually thick and/or hearty bread, most often whole grain bread) topped with either slices of avocado or mashed avocado, with a dash of extra virgin

olive oil and sea salt. If mashed, it is usually laid out in slices and then mashed on the toast with a fork. The toast might be buttered instead of oiled. Fresh squeezed lemon, fresh cracked black pepper, or red pepper flakes are common additions.



Avocado toast in Stockholm, Sweden.jpg by Jami430 of Stockholm, Sweden
(see license section, Creative Commons Attribution-Share Alike 4.0 International license)

Avocado toast has been named **the most annoying food on Instagram** by Kat Stoeffel of *The Cut* in 2014 (June 20).

All license information is at the end.

avocado toast: history

The earliest archaeological evidence for flour (used to make bread) is from about 30,000 years ago, it is likely that they made flat breads.

Avocados have been grown by humans in what is now the state of Puebla, Mexico, since at

least 6,000 B.C.E. The native name was *ahuacatl*, which means testicle.

Modern bread first developed in ancient Egypt about 6,000 years ago. The Egyptians found that leaving dough out in the desert sun would cause it to rise (from yeast spores floating in the air). When baked, the dough would retain its shape. The Egyptians figured out that toasting bread would extend its useful life. Toasting was done by holding the bread over an open fire (using a wooden or metallic stick or a wire frame) or by laying the bread on a hot stone.

The oven was invented by the Egyptians around 3,000 B.C.E. and was originally used for baking leavened bread.

The Romans spread the idea of toasting bread to Europe. The word toast comes from the Latin word *tostum*, which meant scorch or burn, from the Latin word *torrere*, meaning to burn.

Spanish conquistadors of the 16th century depended on avocados while exploring and conquering Mexico. They were the first Europeans recorded to have eaten avocados. They spread avocado into Central America and South America.

Irishman Sir Hans Sloane sold avocado in his 1696 Jamaican plants catalog, calling it an alligator pear tree.

The first toast served in Japan may have been in 1890 at Tokyo's Imperial Hotel, where a breakfast buffet of both Western and Japanese dishes was served in its Viking Sal restaurant.

The first electric toaster (called the Eclipse Toaster) was invented in 1893 by Alan MacMasters of Scotland. The iron wiring would often melt, sometimes causing a fire. In 1905 Albert Marsh created a nickel-chromium alloy that made a safer filament wire. Several other toasters were invented in the early 1900s. The first commercially successful toaster was introduced by General Electric in 1909 (the model D-12, invented by Frank Shailor). These early toasters toasted one side of the bread at a time. In 1913, the Copeman Electric Stove Company created "toaster that turns toast". In 1919, Minnesota mechanic Charles Strite invented the first automatic pop-up toaster.

California postal worker Rudolph Hass spent his life savings on a small avocado grove in 1925. He started grafting to increase his tree supply, eventually developing the Hass avocado, which grew faster and produced more flavor than previous varieties.

A 1937 article in *New Yorker* mentions an "avocado sandwich on whole wheat and a lime rickey" being served in Los Angeles.

Bread and toast started to become popular in Japan during the post-World War II Occupation Era.

Avocados didn't become popular in the United States until the 1950s, starting with California, Florida, and Hawaii.

Tom Selleck, Dean Martin, and Jamie Foxx owned avocado ranches.

Avocado toast was invented in Australia. In 1993, Sydney, Australia, chef Bill Granger introduced a version of avocado toast with a twist of lime, salt, and chilli at Bills in Sarlinghurst (near Sydney).

Australian chef Chloe Osborne, consulting chef at Cafe Gitane in Greenwich Village, brought avocado toast to New York. Her version was pebble-grained bread diamond-cut from a square loaf, toasted and covered with mashed avocado and crushed chile.

Chloe Osborne told *The Washington Post* in 2016, “The thing of putting things on toast is very Australian. It stems from the British breakfast. Fresh tomatoes on toast has been an Australian breakfast for a long time.”

Because of the popularity of avocado toast New Zealand experienced more than 40 large scale avocado thefts in 2016.

Avocado trees, native to the tropics, require large amounts of water. The current popularity of avocado is not sustainable.

avocado toast: the controversy

Elderly Australian newspaper columnist Bernard Salt claimed in *The Australian*, “I have seen young people order smashed avocado with crumbled feta on five-grain toasted bread at \$22 a pop and more. ... How can young people afford to eat like this? Twenty-two dollars several times a week could go towards a deposit on a house.”

Millennial critics pointed out that at average Australian house prices it would take 175 years to save up a down-payment.

Australian multi-millionaire real estate mogul Tim Gurner told Australian *60 Minutes*, “When I was trying to buy my first home, I wasn’t buying smashed avocado for \$19 and four coffees at \$4 each.”

Gurner criticized young people, continuing, “They want to eat out every day, they want to travel to Europe every year. The people that own homes today worked very, very hard for it [and] saved every dollar, did everything they could to get up the property investment ladder.”

Gurner failed to mention that wages have stagnated for decades while housing prices have skyrocketed.

If someone purchased \$19 of avocado every day (even though you can purchase an avocado for less than \$2 each, so Gurner’s describing a 10 avocado a day habit), they would have to pass up a very healthy food for seven years just to come up with the 20% downpayment for the median cost house in the United States.

avocado toast: botanical

This section will provide botanical information on avocado.

Avocado is a fruit, not a vegetable. More specific, the avocado is a berry (a fleshy fruit produced from a single ovary). The avocado tree is in the Lauraceae family.

avocado toast: nutrition

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, said, “Avocados are a good source of fiber and various vitamins and minerals, like vitamin C, vitamin K, folate, and potassium.”

Nutritionist Lisa Goldberg told ABC News, “I love it [avocado toast] for breakfast because avocado has protein and healthy monounsaturated fat, and it's also high in fiber so combined with the Ezekial toast it keeps me full for a good three to four hours. Plus it's high in other nutrients like Vitamins B, C, E, K, and potassium.”

A single avocado averages 975 milligrams of potassium, about double the average of 487 milligrams in a typical banana.

Amount Per	<u>100 grams</u>
Calories	160
	% Daily Value*
Total Fat 15 g	23%
Saturated fat 2.1 g	10%
Polyunsaturated fat 1.8 g	
Monounsaturated fat 10 g	
Cholesterol 0 mg	0%
Sodium 7 mg	0%
Potassium 485 mg	13%
Total Carbohydrate 9 g	3%
Dietary fiber 7 g	28%
Sugar 0.7 g	
Protein 2 g	4%
Vitamin A	2%

Vitamin C	16%
Calcium	1%
Iron	3%
Vitamin D	0%
Vitamin B-6	15%
Vitamin B-12	0%
Magnesium	7%

Amount Per one avocado (201 g)

Calories 322

% Daily Value*

Total Fat 29 g 44%

Saturated fat 4.3 g 21%

Polyunsaturated fat 3.7 g

Monounsaturated fat 20 g

Cholesterol 0 mg 0%

Sodium 14 mg 0%

Potassium 975 mg 27%

Total Carbohydrate 17 g 5%

Dietary fiber 13 g 52%

Sugar 1.3 g

Protein 4 g 8%

Vitamin A 5%

Vitamin C 33%

Calcium 2%

Iron 6%

Vitamin D 0%

Vitamin B-6 25%

Vitamin B-12 0%

Magnesium

14%

Amount Per 1 cup, sliced (146 g)

Calories 234

% Daily Value*

Total Fat 21 g 32%

Saturated fat 3.1 g 15%

Polyunsaturated fat 2.7 g

Monounsaturated fat 14 g

Cholesterol 0 mg 0%

Sodium 10 mg 0%

Potassium 708 mg 20%

Total Carbohydrate 17 g 5%

Dietary fiber 10 g 40%

Sugar 1 g

Protein 2.9 g 5%

Vitamin A 4%

Vitamin C 24%

Calcium 1%

Iron 4%

Vitamin D 0%

Vitamin B-6 20%

Vitamin B-12 0%

Magnesium 10%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

A 2015 study published in the *Journal of the American Heart Association* showed that eating one avocado a day lowered LDL cholesterol levels (bad cholesterol) by approximately 14 points, helping those who are obese or overweight.

An October 2016 study by the Washington University School of Medicine found that certain

green-hued foods, including cucumber, broccoli, edamame, cabbage, and avocado, have a natural compound that helps reduce some of the effects of aging. The compound helps aging cells produce energy, improves bone density, liver, and eyes, as well as increasing metabolism.

avocado toast: selecting ripe avocado

This section will describe how to select ripe avocado.

Lucy Jessop writes in *The Goodness of Avocado: 40 Delicious Health-Boosting Recipes*, “Choose avocados which are firm, and look for those which are undamaged and free from bruises. Hass avocados should be dark brown rather than green; this indicates ripeness. Hold the avocado in the palm of your hand, and gently squeeze, it should yield slightly. Never prod an avocado as they bruise easily.”

Most avocados are grown in south central Mexico, where the climate provides a year-round growing season. In the United States, the primary growing regions are Florida and California.

The Mexican Hass avocado, also common in California, is preferred for avocado toast. Florida avocados are firmer and have less fat.

Some other avocado varieties include Lamb Hass, Pinkerton, Gwen, and Zutano.

The California avocado season peaks from April to July.

You can ripen an avocado by placing it in a brown paper bag with a banana or bananas. The ethylene gas released by bananas will speed up the ripening of the avocado.

avocado toast: cutting avocado

This section will describe how to cut and slice avocado.

The classic method is to slice all the way around the avocado down to the seed, cutting the fruit in half.

Twist the two halves apart and remove the seed. If you live in an appropriate climate, you might be able to use the seed to grow a tree. Unfortunately, avocado purchased from grocery stores rarely has a viable seed.

You can pry the “meat” of the avocado out or you can cube horizontally and vertically before removing the “meat”. This helps if you intend to mash the fruit for easier spreading.

For slices, cut the avocado “meat” vertically.

avocado toast: storing avocado

This section will describe how to store avocado.

Store the avocado at room temperature, out of direct sunlight. It should take 4-5 days for the fruit to ripen. Check ripeness daily. You can slow down the ripening by placing the avocado in a refrigerator.

avocado toast: pets

Both the skin and the seed are harmful and potentially toxic to both dogs and cats. That is, the skin or seed might kill your pet.

The fruit is harmful to birds, but safe for most household pets.

avocado toast: basic recipe



Avocado Toast (12565663524).jpg by Luca Nebuloni of Milan, Italy
(see license section, Creative Commons Attribution-Share Alike 4.0 International license)

The basic recipe is to slice up an avocado and place the slices on a single piece of toast.

Some prefer the avocado to be mashed and seasoned. The mashed avocado should still be somewhat chunky.

The order of ingredients is: toast (on the bottom), spread (optional), seasoning (optional), avocado (sliced or mashed), seasoning (optional), additional toppings (optional), seasoning (optional). If you use seasoning, cut back on the seasoning per location if you choose more than one location.

There are numerous additional toppings that might be added. In general, it is best to limit the additional toppings to no more than one to three. Too many ingredients ruins that balance of flavors. Some of the most common additional toppings include egg (usually poached), tomato, or onion.

The classic Australian recipe is a single slice of toasted bread featuring mashed avocado, salt, black pepper, and a squeeze of lime, typically served with a slice of lime and small piles of the seasonings so that each guest can personalize the seasonings to taste. Red pepper or chili pepper are common alternative or additional seasonings.

avocado toast: toast

Toast the bread until browned and crisp.

Avocado toast works best with heartier breads, such as:

- whole grain bread
- whole wheat bread
- multi-grain bread
- whole grain seeded bread
- thick artisan bread
- sourdough bread
- sourdough rye bread
- muesli

Whole grain bread is popular because it is more nutritious than ordinary bread. Breads with the Whole Grain stamp from the Whole Grain Council have at least 8 grams of whole grains per serving. Organic bread is typically more than twice as likely to be nutritious when compared to conventional bread and more than twice as likely to have whole food ingredients.

The process of toasting bread may create Benzo[a]pyrene and acrylamide, carcinogens generated during the browning process. The darker the surface color of the toast, the higher the concentration of acrylamide. The British Food Standards Agency recommends toasting bread to the lightest colour acceptable.

avocado toast: spread

Usually some kind of spread is placed on the toast before the avocado. The following are some of the common possibilities (pick one choice):

Butter: Softened, unsalted butter.

Olive oil: Lightly brush or drizzle extra virgin olive oil. While olive oil has lots of healthy fat, it should be used sparingly.

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, cautions, “**Olive oil**, cheese, cream cheese, and bacon should be used in moderation.”

Garlic and oil: Peel and cut a clove of garlic. Lightly rub the cut side of the garlic on the toast until fragrant. Lightly brush extra virgin olive oil.

Tahini: Lightly spread with tahini.

Humus: Lightly spread with humus.

Veganaise: Lightly spread with veganaise. One combination is whole wheat toast, veganaise, sliced avocado, sprinkle of lime juice, and red pepper flakes.

Gwenyth Paltrow writes in her cookbook *It's All Good* (for a gluten free avocado toast recipe) “the holy trinity of Veganaise, avocado, and salt that makes this [avocado toast] like a favorite pair of jeans.”

Pesto: Lightly spread with pesto.

avocado toast: seasoning

The following are some of the common possibilities for seasoning:

Salt and pepper: Layered on top of the spread: fine salt and freshly ground black pepper. Layered on top of everything: flaky sea salt, freshly ground black pepper, and crushed red pepper flakes.

Red pepper: Top with red pepper.

Sesame seeds: Top with sesame seeds. Pairs well with tahini.

Paprika: Top with paprika or smoked paprika.

Chili flakes: Top with chili flakes.

Cilantro: Top with fresh cilantro.

Tumeric: Top with tumeric.

Seasonings are healthy in moderation.

Limit the number of seasonings used. Create a theme for your avocado toast. Using too many seasonings at best causes a confusing taste medley and at worst becomes yucky.

avocado toast: avocado



Avocado_with_cross_section_edit.jpg by Muhammad Mahdi Karim of Dar es Salaam, Tanzania
(see license section, GNU Free Documentation License, Version 1.2 only)

Typically use one half (1/2) of an avocado per slice of avocado toast.

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, said, “They’re nutrient-dense, but also calorie-dense—so portion control is important. An average-sized avocado has over 300 calories. It’s easy to consume hundreds of calories, especially if you’re mashing it up and eating it guacamole-style.”

While most recipes recommend half an avocado per piece of toast, Armul recommends one third to one half an avocado over two slices of bread.

Place avocado slices on the toast above the optional spread and seasoning.

You may optionally mash the avocado with a fork.

Some people make their avocado toast with guacamole.

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, said, “Avocados are a good source of fiber and various vitamins and minerals, like vitamin C, vitamin K, folate, and potassium.”

avocado toast: guacamole

Some people make their avocado toast with guacamole.

classic avocado toast

The following are variations on the classic avocado toast:

- whole wheat toast, butter, mashed or sliced avocado, sea salt to taste, and fresh cracked black pepper to taste
- whole grain seeded toast, extra virgin olive oil, mashed or sliced avocado, sea salt to

taste, and fresh cracked black pepper to taste

- toast, extra virgin olive oil, mashed or sliced avocado, salt, and crushed red pepper
- whole grain toast, mashed or sliced avocado, drizzle olive oil and fresh squeezed lemon juice, sprinkle with Kosher salt and red pepper flakes

avocado toast: additional toppings



Avocado Toast with toppings (17347159772).jpg by Arnold Gatilao of Oakland, California, USA
(see license section, Creative Commons Attribution 2.0 Generic)

There are numerous additional toppings that might be added. In general, it is best to limit the additional ingredients to no more than one to three. Too many ingredients ruins that balance of flavors. Some of the most common additional toppings include egg (usually poached), tomato, or onion.

Pick a small number of ingredients that go together well. Choose the spread and seasoning to

match the theme you are creating.

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, recommends adding additional protein beyond the average of 10 grams per avocado, saying, “Just like smoothies, you can go overboard with toppings on your toast and make a healthy food not-so-healthy.”

Armul recommends herbs, spices, seeds, tomatoes, spinach, and other fruit. She cautions, “Olive oil, cheese, cream cheese, and bacon should be used in moderation.”

Some of the common additional toppings are listed in the following chapters. Sorted by popularity.

avocado toast: tomato



A bright red tomato and a cross section of another tomato placed by the side for comparison. Size of uncut tomato is approx 10cm in diameter.

Bright red tomato and cross section02.jpg by fir0002 | flagstaffotos.com.au of Australia
(see license section, Under the GFDL v1.2 (only option))

Tomato. Usually sliced.

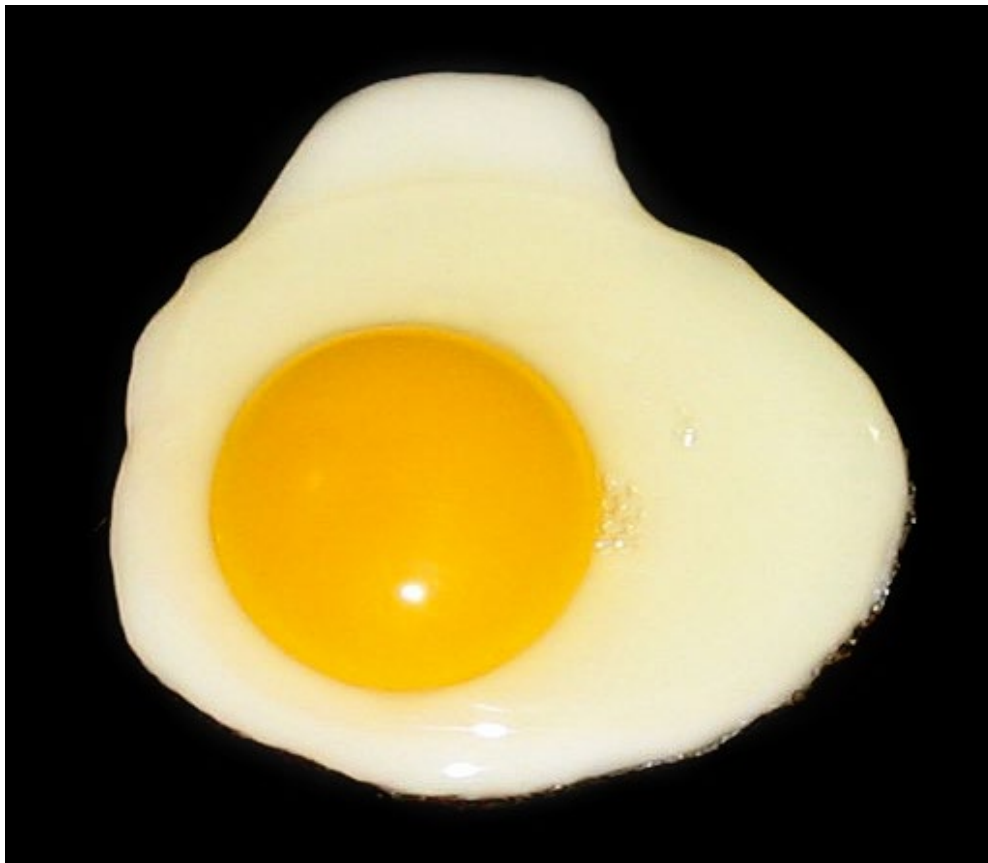
Common groupings:

- multi-grain toast, mashed or sliced avocado, sliced heirloom or beefsteak tomato (two slices), sea salt to taste, and fresh cracked black pepper to taste
- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed

lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), and pesto tomatoes (halved cherry tomatoes mixed with basil vinaigrette)

- whole wheat toast, mashed or sliced avocado, sliced tomato, crumbled feta cheese, sea salt to taste, and fresh cracked black pepper to taste
- whole wheat toast, mashed or sliced avocado, diced tomato, diced onion, dash of sea salt, and dash of fresh cracked black pepper
- multi-grain toast, mashed or sliced avocado, sliced heirloom tomato, one fried egg, tumeric, fresh cracked black pepper, and sea salt
- **Greek** toast, extra virgin olive oil, mashed or sliced avocado, sliced cucumber, sliced tomato, and feta cheese

egg



The egg is a Lucerne brand large grade AA, American. It is shown being cooked on a non-stick (probably Teflon) pan.

Fried egg, sunny side up.jpg by David Benbennick
(see license section, released into public domain)

Egg.

Egg makes avocado toast more hearty, increases the protein, but adds significant unhealthy fats. Eggs are neither vegetarian nor vegan, but are eaten by ovo-vegetarians.

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, recommends adding additional protein beyond the average of 10 grams per avocado,

saying, “I like to see closer to 15 to 20 grams of protein at breakfast.”

Armul recommended one of two eggs, a glass of milk, or Greek yogurt. The last two are dairy items.

Common groupings:

- toast, mashed or sliced avocado, one fried egg, and fresh cracked black pepper
- multi-grain toast, mashed or sliced avocado, one fried egg, sea salt to taste, fresh cracked black pepper to taste
- rye toast, butter, mashed or sliced avocado, one egg fried in butter, tumeric, fresh cracked black pepper, and sea salt
- whole grain toast, mashed avocado, fresh grated Parmesan cheese, one egg (poached, fried, or scrambled), and Tabasco sauce
- multi-grain toast, mashed or sliced avocado, sliced heirloom tomato, one fried egg, tumeric, fresh cracked black pepper, and sea salt
- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), one scrambled egg, and one piece of cooked bacon

avocado toast: onion



Mixed onions: red and brown onions, with and without skin, whole and sliced and in rings.

Mixed Onions.jpg by Colin

(see license section, Under the Creative Commons Attribution-Share Alike 3.0 Unported license)

Onion.

Common groupings:

- whole grain toast, mashed avocado, chopped onion, and lemon juice
- whole wheat toast, mashed or sliced avocado, diced tomato, diced onion, dash of sea salt, and dash of fresh cracked black pepper
- toast, butter or extra virgin olive oil, avocado, smoked salmon, sliced red onion, and lemon juice
- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), sliced red onions, and smoked salmon

avocado toast: cheese



Cheese store. Amsterdam, The Netherlands

Amsterdam - Cheese store - 1605.jpg by Jorge Royan of Amsterdam, The Netherlands

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Dairy or vegan cheese.

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, cautions, “Olive oil, **cheese**, cream cheese, and bacon should be used in moderation.”

Common groupings:

- whole grain seeded toast, mashed avocado, Parmesan cheese, and red pepper flakes (possible cayenne as well)
- whole grain toast, mashed avocado, fresh grated Parmesan cheese, egg, and Tabasco sauce
- whole grain toast, slice of vegan cheese, sliced avocado, sprinkle of black pepper, and another slice of vegan cheese -- toast until cheese melts
- **Buffalo** toast, mashed or sliced avocado, buffalo sauce, and blue cheese
- **Pesto** toast, pesto, mashed or sliced avocado, and Parmesan cheese
- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), crumbled goat cheese, and chives
- whole wheat toast, avocado, feta cheese, mint, and lime
- whole wheat toast, mashed or sliced avocado, sliced tomato, crumbled feta cheese, sea salt to taste, and fresh cracked black pepper to taste
- **Greek** toast, extra virgin olive oil, mashed or sliced avocado, sliced cucumber, sliced tomato, and feta cheese

avocado toast: spinach



Spinach plant, Castelltallat, Catalonia
Espinac 5nov.JPG by Victor M. Vicente Selvas of Catalonia
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Spinach.

Common groupings:

- whole grain toast, mashed avocado, scrambled tofu, spinach, chili flakes, and tumeric

avocado toast: salmon



Salmo salar, Atlantic Salmon, Salmoniformes, Salmonidae, Salmoninae, salmon, fish
Salmo salar.jpg by Timothy Knepp of the United States Fish and Wildlife Service

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Salmon.

Salmon adds lean protein. A single serving of smoked salmon or lox contains almost the entire daily recommended sodium. Salmon is neither vegan nor vegetarian, but is eaten by pescovegetarians.

Common groupings:

- toast, butter or extra virgin olive oil, avocado, smoked salmon, sliced red onion, and lemon juice
- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), sliced red onions, and smoked salmon

avocado toast: tofu

Tofu.

Common groupings:

- whole grain toast, mashed avocado, fried sliced tofu, sriracha sauce
- whole grain toast, mashed avocado, scrambled tofu, spinach, chili flakes, and turmeric

avocado toast: salsa/pico de gallo

Salsa or pico de gallo.

Common groupings:

- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), and pico de gallo
- whole grain toast, guacamole, salsa, bit of lime juice, and a bit of cilantro
- whole grain toast, guacamole, salsa, bit of lemon juice, and black pepper

avocado toast: cucumber

Cucumber.

Common groupings:

- **Greek** toast, extra virgin olive oil, mashed or sliced avocado, sliced cucumber, sliced tomato, and feta cheese

avocado toast: black beans

Black beans.

Common groupings:

- **Tex-Mex** toast, mashed or sliced avocado, black beans, lime juice, and hot sauce

avocado toast: nuts

Nuts.

Common groupings:

- whole grain seeded toast, mashed avocado, cashew and pistachio nuts, and red pepper flakes

avocado toast: cilantro

Cilantro.

Common groupings:

- whole grain toast, guacamole, salsa, bit of lime juice, and a bit of cilantro
- whole grain toast, guacamole, salsa, bit of lemon juice, and black pepper

avocado toast: chives

Chives.

Common groupings:

- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), crumbled goat cheese, and chives

avocado toast: strawberries

Strawberries.

Common groupings:

- toast, sliced or mashed avocado, sliced strawberries, and fresh cracked black pepper

avocado toast: nutritional yeast

Nutritional yeast.

Nutritional yeast is from the fungi kingdom and therefore acceptable to vegetarians and vegans.

Common groupings:

- whole grain toast, mashed avocado, nutritional yeast, salt, and red pepper flakes
- whole grain toast, mashed avocado, nutritional yeast, salt, and chili flakes

avocado toast: bacon

Bacon. This is a very unhealthy choice and is included only for completeness

Bacon is filled with bad fats, sodium, and dangerous chemicals. I am guessing everyone knows that neither vegans nor vegetarians eat bacon, although semi-vegetarians might.

Torey Armul, registered dietitian and spokesperson for the Academy of Nutrition and Dietetics, cautions, “Olive oil, cheese, cream cheese, and **bacon** should be used in moderation.”

Common groupings:

- wheat toast, mashed or sliced avocado, and two slices of cooked bacon
- **B.A.T.** toast, mashed or sliced avocado, two slices of beefsteak tomato, and two slices of cooked bacon
- wheat toast, butter, mashed or sliced avocado, one fried over easy egg, two slice of beefsteak tomato, and two slices of cooked bacon
- thick cut bread toasted golden brown, avocado mixture (mashed avocado, fresh squeezed lemon juice, Kosher salt to taste, and fresh cracked black pepper to taste), one scrambled egg, and one piece of cooked bacon

avocado toast: growing avocado

A common biology experiment is to grow an avocado seed over a jar of water. The large size of the seed and the slow growth make the experiment easy to observe.

Unfortunately, avocado trees grown from store bought fruit rarely produce fruit.

It takes five to seven years for a an avocado tree to start producing fruit. You must have the matching variety of avocado nearby to pollinate your tree. And growing the tree takes the proper climate, the proper soil, and lots of water.

You can certainly grow an avocado tree from seed as an ornamental, but don't expect it to produce fruit.

avocado toast: licenses

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Photographer: Jami430 of Stockholm, Sweden

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Avocado with cross section edit.jpg

Avocado with its cross section.

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Avocado Toast with toppings (17347159772).jpg

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po' boy

po' boy seafood or vegetarian po-boy sandwiches

The po' boy (or po-boy or po boy) is a traditional sandwich from Louisiana. The two most common types are sloppy roast beef or fried seafood. This web page will discuss the seafood and vegetarian versions of the po-boy.

Po'boy was #19 in Food Republic's December 2016 rankings of favorite sandwiches. They listed fried seafood, lettuce, tomato, pickles, mayo, and hot sauce as the preferred ingredients.

[Food Republic 2016 Sandwich Rankings](#)

Po'boy was the number #27 most popular sandwich in the U.S., according to a 2014 survey of thousands of American consumers conducted by menu research firm Datassential. 1% of Americans ate the po'boy sandwich in the previous two weeks. 71% ate the sandwich away from home. 71% preferred the sandwich hot, while 29% preferred the sandwich cold.

There is a general assumption that you already know the basics of cooking and therefore this webpage will provide more general instructions than is typical for recipes.

Normally there should be one featured item in your po' boy. Simplicity is key to a delicious po-boy. The po-boy is normally served on a roll, usually a French roll or baguette. The po boy can be “dressed” or plain.

Seafood po boy: The seafood po' boy usually features fried shrimp, oysters, or a combination of both. Other common seafood varieties include crawfish, soft shell crab, or catfish.

Vegetarian po boy: The vegetarian (or vegan or semi-vegetarian) po' boy typically emphasizes one main vegetable fried as if it were seafood. The most common choices for the main vegetable are cauliflower, mushrooms, or tofu. One variation that strays from the normal po-boy concept involves carving out space inside the roll and filling it with a mixture of several fried vegetables.

Dressed po boy: The po' boy is “dressed” with shredded Romaine lettuce, sliced sweet tomato, crunchy dill pickles, and remoulade sauce. Fried po-boys might be dressed with melted butter (including flavored butters) and sliced dill pickle rounds. Less common is including some variation of slaw.

Hot po boy: The po' boy can be served “hot” by adding Louisiana style hot sauce. Non-

seafood po-boys might also have mustard, usually a coarse-grained Creole mustard.

Meals: The po' boy can be served alone, or with red beans and rice, gumbo, bisque, jambalaya, crawfish kickers and dipping sauce, french fries, sweet potato fries, fried pickles, potato chips, or coleslaw.

The po' boy evolved from oyster loaves, a fried oyster sandwich on French loaves common in New Orleans and San Francisco. The most common (but unconfirmed) story is that the sandwich was created by the brothers Bennie and Clovis Martin. The two brothers moved from Raceland, Louisiana, to New Orleans in the mid-1910s, where they worked as streetcar conductors. In 1922 the brothers opened the Martin Brothers' Coffee Stand and Restaurant in the French Market. The city's carmen union struck on July 1, 1929. The brothers offered free po' boy sandwiches to striking streetcar motormen and conductors.

Shrimp, oysters, crab, lobsters, and other crustaceans and mollusks used to be considered the dregs of the sea and were typically only eaten by the working class, who couldn't afford fish. At the time the po' boy was created, only the poor ate shrimp and oysters.

roll

The traditional source of po' boy bread is the Leidenheimer Baking Company, founded by George Leidenheimer in New Orleans in 1896. Traditionally cut from 24 inch French rolls, a regular po' boy is one foot long.

If the crust of your French bread is no longer crispy, place it in an oven at 350 degrees F for a few minutes until crisp. [Shrimp Po' Boy by Marc of Norecipes](#)

remoulade

Some common ingredients for the remoulade include: mayonnaise, whole grain mustard, capers in brine (drained and chopped), flat leaf parsley (chopped), scallion (chopped), garlic (chopped), lemon zest, lemon juice, either paprika or pimentón (smoked paprika), and possibly Louisiana style hot sauce. [Shrimp Po' Boy by Marc of Norecipes](#)

You may substitute vegan mayonnaise.

The primary ingredient and bulk of the remoulade is the mayonnaise. Other ingredients should be added in small amounts for flavoring. [Shrimp Po' Boy by Marc of Norecipes](#)

Mix the ingredients in a small bowl and whisk to combine. Chill in the refrigerator, at least while you work on the other preparations for the sandwich, preferably for 24 hours before making your po' boy sandwiches. [Shrimp Po' Boy by Marc of Norecipes](#)

A simplified version is mostly vegan mayonnaise, with hot sauce, sweet green relish, and pickle juice. [vegan oyster mushroom po' boy](#)

dressing

The po' boy is typically “dressed” with shredded (or finely chopped) Romaine lettuce, sliced sweet tomato, crunchy dill pickles, and remoulade sauce.

Prepare your dressing (lettuce, tomato, and pickles) before you start cooking. You want to be able to dress your po' boy sandwiches immediately after frying your featured ingredient.

breeding

The breeding for a po' boy is usually a mixture of cornmeal and flour. The cornmeal provides an unmiskable crunch. Mix up your breeding materials.

The most common breeding materials are cornmeal and all-purpose flour.

Some cooks will add in panko bread crumbs. [vegan oyster mushroom po' boy](#)

seasoning

Mix your spices together in a small bowl. [Shrimp Po' Boy by Marc of Norecipes](#)

Some possible spices for fried shrimp include: pimentón (smoked paprika), paprika, salt, garlic powder, onion powder, and ground black pepper. [Shrimp Po' Boy by Marc of Norecipes](#)

Some possible spices for fried mushrooms include: pimentón (smoked paprika), paprika, sea salt, cayenne, garlic powder, dried basil, and ground black pepper. [vegan oyster mushroom po' boy](#)

preparation

Sprinkle seasoning directly onto your shrimp, oysters, seafood, or featured vegetable, then toss them into the breeding. This is sufficient for a thin coating. For a thick coating, follow up the initial dusting by dipping the featured item in a beaten egg and then dredge them again through the breeding.

marinade

If you make your po' boy with tofu, mushroom, or cauliflower, you will want to marinate your main ingredient before cooking.

Suggested ingredients for a fried mushroom marinade include: ground flax, water, non-dairy milk, apple cider vinegar, either vegan oyster sauce or vegan worcester sauce, farlic powder, dried basil, and white pepper. [vegan oyster mushroom po' boy](#)

Another set of possible ingredients for your marinade include: chopped cooked onions, red wine, Balsamic vinegar, Worcester sauce, dried thyme leaves, and garlic. [Burgundy Beef Po Boys](#)

[with Dipping Sauce by the Editors of Publications International, Ltd.](#)

Mix ground flax and a little bit of water together and let sit in the refrigerator for about 10 minutes until it thickens. [vegan oyster mushroom po' boy](#)

Mix the non-dairy milk, apple cider vinegar, oyster sauce or worcester sauce, garlic powder, basil, and white pepper together. The mixture is mostly milk with about 1/4 the amount of vinegar. Add in the flax mixture last. [vegan oyster mushroom po' boy](#)

Place the marinade and the main ingredient (tofu, mushrooms, or cauliflower) in a large zipper bag. Make sure there is enough marinade to fully submerge your main ingredient. Refrigerate for 15-20 minutes. [vegan oyster mushroom po' boy](#)

shrimp

Follow the breading instructions above and then fry. Small shrimp (shelled and deveined) are preferable to large shrimp, as they offer more surface area for breading.

Put two inches of oil in a heavy bottomed pot and preheat to 350 degrees F or 180 degrees C. [Shrimp Po' Boy by Marc of Norecipes](#)

Prepare a wire rack with a triple layer of paper towels. [Shrimp Po' Boy by Marc of Norecipes](#)

Dry any excess water off the shrimp and place them in a bowl. Toss the shrimp while sprinkling the seasoning mix, coating each shrimp evenly. [Shrimp Po' Boy by Marc of Norecipes](#)

Place your breading material in a bag and add the shrimp in batches. Close the bag and toss to coat each shrimp evenly. [Shrimp Po' Boy by Marc of Norecipes](#)

Remove the shrimp from the bag and add them to the pre-heated oil. Fry until the shrimp are golden brown and crisp. Use a wire strainer to transfer the the shrimp tot he prepared wire rack. Repeat until all of the shrimp is cooked. [Shrimp Po' Boy by Marc of Norecipes](#)

mushrooms

Some common mushroom choices are oyster mushrooms or portobello mushrooms.

Preheat oil to 375 degrees F in a large iron skillet or heavy bottomed flat pan. [vegan oyster mushroom po' boy](#)

Remove a few mushroom pieces from the marinade. Season and bread in a manner similar to that described for shrimp. [vegan oyster mushroom po' boy](#)

Place each mushroom piece into the hot oil and fry for 2-3 minutes, flipping halfway through. [vegan oyster mushroom po' boy](#)

Using a pair of tongs, move the cooked mushrooms to a wire rack covered with paper towels to absorb excess oil. [vegan oyster mushroom po' boy](#)

Repeat in small batches until all of the mushrooms are cooked. Assemble and serve your po' boy sandwiches immediately. [vegan oyster mushroom po' boy](#)

assembly

Slice the bread in half the long way, leaving a little crust on the back to serve as a hinge.

[Shrimp Po' Boy by Marc of Norecipes](#)

Optionally spread melted butter on the inside top and bottom of the bread.

Spread a generous layer of remoulade on the bottom bread. [Shrimp Po' Boy by Marc of Norecipes](#)

Place the featured food (shrimp, oysters, catfish, crawfish, cauliflower, or mushrooms) on the remoulade bed. [Shrimp Po' Boy by Marc of Norecipes](#)

Top with pickles, lettuce, and tomatoes, in your preferred order. [Shrimp Po' Boy by Marc of Norecipes](#)

Finish your po' boy with a drizzle of remoulade, and possibly hot sauce, depending on preference. [Shrimp Po' Boy by Marc of Norecipes](#)

Serve immediately.

recipes

[Burgundy Beef Po' Boy](#): Ingredients are boneless beef chuck shoulder or bottom round roast, chopped onions, red wine, balsamic vinegar, beef bouillon granules, Worcester sauce, dried thyme leaves, garlic powder, warmed and split Italian rolls.

tabouli

tabouli

Tabouli is a traditional Middle Eastern vegetable dish based on bulghar wheat, mint, cucumber, and olive oil.

nutritional information:

No cholesterol.

High in dietary fiber and manganese.

Very high in vitamin A and vitamin C.

Excellent source of protein (essential amino acids), especially in quinoa version or with added hemp seed meal.

Excellent source of essential fatty acids.

Eat tabouli at every lunation (Full Moon, New Moon, and Quarter Moons) and major Goddess holy days throughout the summer. Optional any day in the summer.

cookware:

- Cooking pot with cover
- Sauce pan with cover
- Large or medium mixing bowl(s)
- Glass jar [optional]
- Wooden mixing spoon
- Sharp cutting knife

ingredients:

There is quite a bit of flexibility in both choice of ingredients and in quantites (proportions) of ingredients.

Please read through recipe instructions and notes before choosing quantities of ingredients.

- 1/2 to 2 cups of dry bulghar wheat (also called cracked wheat or burghur wheat)
- optional: 1/2 to 2 cups whole grain quinoa (not a traditional ingredient)
- optional: 1/2 to 1 cup hemp seed meal (not a traditional ingredient)
- optional: 1 cup of cooked and drained garbanzo beans (also called chick peas) or lentils (neither is a traditional ingredient)
- boiling water: twice as many cups of water as quinoa, equal number of cups of water as bulghar
- 1 cucumber: peeled and seeded, then diced or finely chopped
- 1 to 4 tomatoes: firm, chopped or diced (left out of some traditional recipes)
- 2 tablespoons to 1 cup fresh mint (typically 1/2 to 1 cup): chopped
- optional substitute: lemon balm for some or all of the mint
- 1 to 2 cups or 1 to 3 bunches fresh flat leaf parsley: finely chopped
- optional: 1/2 to 1 tablespoon fresh basil
- optional: 1 bunch coriander (also called cilantro): chopped
- optional: 2-3 bunches green onions or scallions: sliced (both white and green parts); this is a common traditional addition to the recipe
- optional: 1 to 3 cloves garlic: minced (note reduce or eliminate green onion when adding garlic)
- optional: 1 red onion: chopped (spicier substitute for green onions); somewhat changes the character of the taste
- optional: 2-3 carrots: grated finely (drastically changes character of flavor, but adds nutrition)
- optional: 1 red chili: finely chopped (spicier version); drastically changes the character of the taste
- 1/2 cup fresh squeezed lemon juice
- 1/4 to 3/4 cups cold pressed extra virgin olive oil
- 1 to 2 tablespoons hemp seed oil per person eating tabouli
- optional: 1 tablespoon flax seed oil per person eating tabouli
- optional: 1 tablespoon freshly ground black pepper (most recipes call for pepper to taste)
- optional: 1/2 teaspoon raw sea salt (most recipes call for ordinary salt to taste)
- optional: 1/2 teaspoon cayenne pepper
- optional: 1/2 teaspoon ground cumin
- optional: 1/2 orange, zest and juice (reduce lemon juice by half); drastically changes the character of the taste
- optional: pistachios, finely chopped
- Romaine lettuce

preparation:

Traditional tabouli is made with bulghar wheat. The quinoa version is popular in health food circles (unlike bulghar wheat, quinoa is a complete protein). The lentil and garbanzo bean version makes a composite protein. The hemp seed meal is also a complete protein. A recommended

version has equal portions bulghar wheat and quinoa with half portion of hemp seed meal.

Cooking bulghur wheat: Put bulghur wheat in a bowl. Boil the water in a pot. Pour the boiling water over the bulghur wheat. Let the bulghur wheat soak in the hot water for 30 minutes to 2 hours. The wheat should absorb all of the water. If not, drain off the excess with a colander. The bulghur wheat should be light and fluffy.

Cooking quinoa: Thoroughly soak the quinoa in cold water for five minutes using medium size bowl. Drain and rinse under cold running water. Note that you can purchase pre-rinsed quinoa. Pour rinsed quinoa into a sauce pan. Lightly toast the quinoa in 1/2 to 2 tablespoons olive oil (this is in addition to the amount used as part of the dressing). Add water and bring to a full boil. Cover with a tight fitting lid and reduce heat to a low simmer. Cook for about 15 to 20 minutes (until water is absorbed). Optionally drain excess water and save to add back to finished mixture if needed to make a nice tabouli consistency. Let quinoa cool before mixing with other ingredients.

Prepare dressing: Mix lemon juice, olive oil, hemp seed oil, flax seed oil (if used), garlic (if used), black pepper (if used), sea salt (if used), cayenne pepper (if used), orange zest and juice (if used), and cumin (if used) in a bowl or glass container. Let dressing sit

Preparing salad: Chop the mint, parsley, cucumber and tomatoes. Also chop any optional ingredients used, such as lemon balm, basil, green onions, scallions, red onion, carrot, and/or red chili. Optionally use a blender or food processor to mince parsley. Mix salad parts in bowl.

Optionally mix the sea salt and freshly ground black pepper with the chopped green onions or scallions first. This lets the salt and pepper bring out the sweetness of the onion juice. In this case, mix mint, parsley, and basil, then tomatoes, cucumber and other optional vegetables, finally mixing in the green onion mixture.

Combine all of the bulghur wheat, quinoa, hemp seed meal with the vegetable ingredients in a mixing bowl. Combine well.

Thoroughly mix in the dressing.

Put the mixing bowl in the refrigerator for at least one hour. A full night is even better.

Serve cold or at room temperature.

Place the tabouli salad on a bed of Romaine lettuce or use hearts of Romaine lettuce to scoop up the tabouli salad.

Optionally sprinkle with chopped pistachios. In the spicier version, serve with a spoonful of yoghurt and sprinkle with pistachios.

diet or fasting

Goddess diet

Goddess diet

The courts often consider the existence of special diet or fasting in determining if a religion is legally valid.

legal standards

“5. h. Diet or Fasting: Religions often prescribe or prohibit the eating of certain foods and the drinking of certain liquids on particular days or during particular times.” —*United States of America v David Meyers*

check pictures

Rasta ital diet

The Rasta ital diet is compatible with the Kemetic (ancient Egyptian) Goddess Diet.

The word *ital* is derived from the English word *vital*.

ital diet has two key principles:

1. Refuse to eat any processed foods (because that would involve taking part in a system that is oppressive).
2. Don't eat any red meat (because of the belief that red meat rots inside the body).

The foods of an ital diet will vary from person to person, ranging from pure vegan through vegetarian to various semi-vegetarian diets.

Some refuse to eat fish, while others believe that the Bible supports the eating of fish.

Some also forbid any dairy products.

The essence of ital is to eat natural foods that are good for you.

Kemetic or ancient Egyptian religion

Goddess Diet Plan

introduction

The Goddess Plan is a lifelong method for any woman or girl to achieve and maintain Goddess status. The Goddess Diet Plan may also be used by men and boys, with small modifications for gender and sex.

summary



This diet is customized to each individual by each individual. It is easy to adjust to match doctor's orders.

This diet is similar to many healthy diets and can easily be adjusted to meet the requirements of most healthy diets.

The essence of this diet is things most everyone already knows: * * * Eat less meat. Eat lots of plants. Eat less processed foods. Cut back on salt, sugar, and fat. Eat plants. Eat lots of plants. Eat a wide variety of plants. Keep introducing good plants to replace and take up the “eating space” currently occupied by things that you already know you need to change. * * *



Slow incremental changes towards a healthy diet makes it easier to maintain a healthy diet for life.

Extreme diets tend to deprive the body of some essential nutrient for about three weeks, resulting in weight loss. Some is often just water loss from less salt. Some is from the loss of an essential nutrient. But the weight loss is temporary. That much weight, and often more, comes back. And the three weeks of deprivation of an essential nutrient may cause permanent damage to the body.

This diet is presented in “days”. Those do *not* have to be consecutive days. While too much change at once is overwhelming (and likely to cause enough chaos for failure), you can do more than one day of this diet in a single real day or spread a day of this diet over several days, a week, or more. Adopt this diet to your own schedule and make it work personally for you.

Change at a pace that you can sustain. Of course, make any immediate changes a doctor orders. Otherwise, change at your own pace.

You already know a lot of what is here.

You do not have to be a Witch or Pagan or woman to follow this diet. You do not have to believe in Goddess. You may have any religion or no religion at all.

While anyone can follow this diet plan, it is also a religious diet for those of the Kemetic (ancient Egyptian) religion. There are many religious variations, but the two most important are the strict vegan version and the Aset (Isis) version (which allows fish, seafood, and dairy).

To be a wab-priest or web-priestess (the priesthood responsible for the purity of ritual and the cleanliness of sacred rooms, tools, paraphernalia, and priesthood) required pure veganism, dressing in white, baptism in a lake of water, and avoiding all animals (other than temple animals, such as cats at a temple of Bast) while serving in the temple. Outside of the temple work, the Aset (Isis) version of this diet can be used.

This is a seven year diet plan intended for recovery from health disaster. The Goddess diet will help you recover from (or control) obesity, diabetes, heart disease, celiac disease, food allergies, and other common health problems.

The Western Pattern Diet (also known as Standard American Diet or SAD) emphasizes large amounts of red meat, sugary desserts, refined grains (especially corn, soy, and wheat), high fat foods (especially dairy products), high sugar drinks, and chicken eggs.

Almost everyone knows this is a health disaster. The common response is to use over the counter pharmaceutical company drugs to cover up the adverse symptoms so that the bad diet can be continued. Until a serious, life-threatening problem occurs. Uh, oh.

The Goddess Diet is just plain good natural eating. You have probably at least heard of most everything here. You probably generally know these things are good for you. You may be forced into healthy eating patterns by a life-threatening disease or trauma. You may be tired of being overweight. You may already be healthy and just want to tune up your diet.

Whatever the reason and your personal circumstances, you are now ready to fix your diet.

The Goddess Diet Plan goes beyond simple rules and restrictions, instead providing general ideas that each person must customize to the individual needs of his or her own body. You can modify and change the order of the steps to meet your own needs.

Note that this chapter is still being written and is being changed and updated on a regular basis.

Information on cutting back on sugar and salt being added.

basics of the Goddess diet

basics of the Goddess diet

We are taught that diet and exercise are the only factors in being healthy and that those who are overweight are simply lazy and undisciplined. That's garbage.

While exercise, nutrition, and diet are important factors, the greatest single cause of obesity is depression. The most common self-treatment for depression is eating "comfort food".

The second most common cause of obesity is low self-esteem. If a woman doesn't love herself, then she has little or no motivation to properly take care of her body.

The starting point for achieving and maintaining a healthy body is to create a lifestyle that encourages and supports love of self.

Certainly you want to learn the right foods to eat and the proper exercise and that kind of stuff, but it is far more important to transform your mind and spirit.

You want to set yourself free from the ancient Sumerian belief in "sin-nature" and realize that you are a manifestation of the divine. You are Goddess incarnate!

You can use ancient Egyptian Witchcraft to transform your life and achieve a healthy you.



tomb of Queen Nefertari

Learning about how food affects the health of the body is a very practical way to start learning about Kemetic Witchcraft.

As you learn about healthy eating, your overall health will improve, but you need to avoid the tendency to start lecturing your friends. Nobody appreciates the Food Nazi.

"Health is more than simply the absence of illness. It is the active state of physical, emotional, mental and social well-being."

World Health Organization

The process of a woman seeking the Goddess within involves both the physical and the spiritual.

Any woman can become goddess incarnate, but very few women actually achieve this goal. The path towards this goal is often fulfilling and enriching on its own. Sometimes the journey really is more important than the destination.

"One of the most interesting developments in women's spirituality is that of a widespread view of Goddess as *immanent* rather than transcendent, i.e. within each person, within all of nature, not as a woman sitting on a throne or flying around up in the heavens. Many women today perceive Goddess not only as immanent but as immament process, as the flow of life energy." —Merlin Stone in *Ancient Mirrors of Womanhood*, page xiii

Some women have numerous advantages (such as genetics, economic wealth, cultural acceptance, control over their time, etc.) and still fail to become goddesses, while other women facing extreme hardships (such as physical disabilities, mental disabilities, poverty, cultural oppression, poor neighborhoods, etc.) are able to become goddesses.

Certainly there are many external circumstances and other factors out of your control, but there is much that each woman can do if she really wants to.

Ancient cultures have three basic archetypes of goddess: Maiden, Mother, and Grandmother (or crone). You will want to achieve the goddess nature appropriate for your age.

"There is only one good, knowledge, and one evil, ignorance."

Socrates

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Day 3: water
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Day 4: hemp seed oil
Day 5: beverage choices
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Day 6: processed foods
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Day 19: fizzy drinks
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Day 21: cranberry juice
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Day 22: breakfast
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Day 24: cinnamon
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Day 26: green leafy vegetables
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Day 27: coffee
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Day 28: ground vegetables
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Day 29: teas
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Day 30: root vegetables
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Day 31: alcohol
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Day 32: beans and legumes
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Day 33: soup
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Day 34: garlic

alanine
Day 35: fruit and vegetable juices
arginine
Day 36: whole grains
asparagine
Day 37: green tea
aspartic acid
Day 38: sea vegetables
cysteine
Day 39: herbal tea
glutamic acid
Day 40: seeds and nuts
daily seed mix
Day 41: rooibos tea
glutamine
Day 42: tumeric
glycine
Day 43: mushrooms
histidine
Day 44: fried food
proline

Day 45: hemp seed
serine
Day 46: fast food
taurine
Day 47: cereals
tyrosine
Day 48: cilantro
theanine
Day 49: ground meat
essential fatty acids
Day 50: mung bean sprouts
alpha-linolenic acid (omega-3)
Day 51: cakes, pies, and sweets
linoleic acid (omega-6)
Day 52: flax seed oil
omega-9
Day 53: junk food
Vitamin A (retinol and carotenoids, beta carotene)
Day 54: olive oil
Vitamin B1 (thiamine)
Day 55: flax seeds
Vitamin C (ascorbic acid)

Day 56: oregano
Vitamin D (calciferol, cholecalciferol)
Day 57: berries
Vitamin B2 (riboflavin)
Day 58: ginger tea
Vitamin E (tocopherols, tocotrienols)
Day 59: citrus fruits
Vitamin B12 (cobalmins, cyanocobalamin, hydroxycobalamin, methylcobalamin)
Day 60: buttermilk
Vitamin K (phylloquinone, menaquinones)
Day 61: high fiber fruits
Vitamin B5 (pantothenic acid)
Day 62: chives
Vitamin B7 (biolin)
Day 63: melons
Vitamin B6 (pyridoxine, pyridoxine, pyridoxal)
Day 64: bread
Vitamin B3 (niacin, niacinamide)
Day 65: fleshy red fruits
Vitamin B9 (folic acid, folinic acid)
Day 66: juicing
sodium

Day 67: dried fruits
potassium
Day 68: rosemary
chlorine
Day 69: turkey
calcium
Day 70: spinach
phosphorus
Day 71: allium vegetables
magnesium
Day 72: wheat
zinc
Day 73: cruciferous vegetables
iron
Day 74: parsley
manganese
Day 75: orange vegetables
copper
Day 76: sprouts
iodine
Day 77: honey
selenium

Day 78: spearmint
tabouli
Day 79: lamb
molybdenum
Day 80: quinoa
silver
Day 81: pumpkin
sulphur
Day 82: thyme
cobalt
Day 83: apple
nickel
Day 84: sweet potato
boron
Day 85: butter and ghee
strontium
Day 86: tomato
silicon
Day 87: orange
dietary clay
chromium
Day 89: cold water fish

Day 90: fermented foods
Day 91: bok choy
Day 92: pickled foods
Day 93: alfalfa sprouts
Day 94: salmon
Day 95: sesame
Day 96: avocado
Day 97: cantaloupe melon
Day 98: pasta
Day 99: grapefruit
Day 100: green beans
Day 101: cloves
Day 102: chicken eggs
Day 103: wheat germ
Day 104: lemon
Day 105: lime
Day 106: nut butter
Day 107: stevia
Day 108: almonds
Day 109: blueberry
Day 110: halibut
Day 111: walnut

Day 112: basil
Day 113: amaranth
Day 114: coconut oil
Day 115: apricot
Day 116: peppermint
Day 117: asparagus
Day 118: peppers
Day 119: rosehips
Day 120: yogurt
Day 121: raw foods
Day 122: maple syrup
Day 123: banana
Day 124: herring
Day 125: beets
Day 126: chicory
Day 127: bran
Day 128: carrot
Day 129: celery
Day 130: cabbage
Day 131: chamomile tea
Day 132: eggplant

Day 133: horseradish
Day 134: figs
Day 135: chicken
Day 136: goat's cheese
Day 137: goat milk
Day 138: grape
Day 139: mustard seed
Day 140: cottage cheese
Day 141: raisin
Day 142: oyster
Day 143: cayenne
Day 144: kiwi
Day 145: nectarine
Day 146: peach
Day 147: pear
Day 148: licorice
Day 149: onion
Day 150: clam
Day 151: barley
Day 152: tangerine
Day 153: sweet bell pepper
Day 154: potato

Day 155: aloe vera juice
Day 156: prune
Day 157: trout
Day 158: cranberry
Day 159: radish
Day 160: pumpkin seeds
Day 161: agave
Day 162: wild rice
Day 163: brown rice
Day 164: winter squash
Day 165: summer squash
Day 166: black pepper
Day 167: soy bean
Day 168: soy cheese
Day 169: plant milk
Day 170: cherry
Day 171: sea bass
Day 172: turnip root
Day 173: nutmeg
Day 174: pinto beans
Day 175: leeks
Day 176: artichoke

Day 177: tuna
Day 178: açai
Day 179: molasses
Day 180: sunflower seed
Day 181: cocoa and dark chocolate
Day 182: raw cacao
Day 183: chili pepper
Day 184: kefir
Day 185: blue-green algae
Day 186: coconut water
Day 187: hot peppers
Day 188: spelt
Day 189: brewer's yeast
Day 190: lentils
Day 191: arame
Day 192: shitake mushroom
Day 193: almond oil
Day 194: dill leaf
Day 195: royal jelly
Day 196: burdock root
Day 197: chestnuts
Day 198: broccoli sprouts

Day 199: whey protein
Day 200: green peas
Day 201: boysenberries
Day 202: scallops
Day 203: hijiki
Day 204: brown mushroom
Day 205: sunflower oil
Day 206: rose
Day 207: buckwheat
Day 208: beepollen
Day 209: garbanzo
Day 210: macadamia nuts
Day 211: mustard sprouts
Day 212: watermelon
Day 213: crustacea
Day 214: kombu
Day 215: white mushroom
Day 216: safflower oil
Day 217: paprika
Day 218: propolis
Day 219: couscous
Day 220: radish sprouts

Day 221: noni
Day 222: mollusks
Day 223: nekombu
Day 224: enoki mushroom
Day 225: hazelnut oil
Day 226: marjoram
Day 227: Brazil nuts
Day 228: onion sprouts
Day 229: olives
Day 230: dates
Day 231: white fleshed fish
Day 232: kelp
Day 233: oyster mushroom
Day 234: red pepper, dried
Day 235: sauerkreaut
Day 236: cabbage sprouts
Day 237: goji
Day 238: mackerel
Day 239: wakame
Day 240: tree ear mushrooms
Day 241: lemonbalm
Day 242: clover sprouts

Day 243: honeydew
Day 244: sardine
Day 245: mekabu
Day 246: portobello mushrooms
Day 247: sage
Day 248: hazelnuts
Day 249: sunflower sprouts
Day 250: turnip green
Day 251: papaya
Day 252: alaria
Day 253: crimini mushrooms
Day 254: cane sugar
Day 255: pine nuts
Day 256: lentil sprouts
Day 257: coconut
Day 258: pineapples
Day 259: nori
Day 260: maitake mushrooms
Day 261: dill seed
Day 262: kale
Day 263: fenugreek sprouts

Day 264: blackberries
Day 265: dulse
Day 266: cardamom
Day 267: rocket
Day 268: raspberry
Day 269: agar-agar
Day 270: cumin
Day 271: pomegranate
Day 272: peanut
Day 273: string beans
Day 274: plums
Day 275: rye
Day 276: Irish moss
Day 277: coriander
Day 278: wheat grass
Day 279: strawberry
Day 280: Corsican seaweed
Day 281: allspice
Day 282: arugula
Day 283: pistachio nut
Day 284: currant
Day 285: tofu

Day 286: sea palm
Day 287: fennel seed
Day 288: millet
Day 289: tempeh
Day 290: cashew
Day 291: barleygrass
Day 292: kumquat
Day 293: ocean ribbon
Day 294: fenugreek
Day 295: cod
Day 296: squash seed
Day 297: chia seeds
Day 298: rapini
Day 299: pecan
Day 300: spirulina
Day 301: vanilla
Day 302: maca powder
Day 303: filberts
Day 304: chlorella
Day 305: sugar snap peas
Day 306: kidney beans
Day 307: Brussels sprouts

Day 308: umeboshi plums
Day 309: cauliflower
Day 310: saffron
Day 311: collard greens
Day 312: scallions
Day 313: shallots
Day 314: guava
Day 315: Swiss chard
Day 316: bulghar wheat or bulgur wheat
Day 317: tarragon
Day 318: edamame
Day 319: dandelion greens
Day 320: triticale
Day 321: butternut squash
Day 322: endive
Day 323: jicama
Day 324: fennel
Day 325: cereal grasses
Day 326: kamut
Day 327: mango
Day 328: kohlrabi
Day 329: rutabaga

Day 330: lemon verbena
Day 331: crisp breads
Day 332: okra
Day 333: Jerusalem artichoke
Day 334: purslane
Day 335: watercress
Day 336: snow peas
Day 337: bitter melon
Day 338: microalgae
Day 339: natto
Day 340: persimmon
Day 341: quince
Day 342: kimchi
Day 343: star fruit
Day 344: canola oil
Day 345: carob
Day 346: cucumber
Day 347: lettuce
Day 348: parsnips
Day 349: sorrel
Day 350: sweet corn
Day 351: tamarind

Day 352: lima beans
Day 353: tortillas
Day 354: zucchini
Day 355: black beans
Day 356: black-eyed peas
Day 357: baby bok choy
Day 358: red palm oil
Day 359: angelica
Day 360: elderberry
Day 361: ajowan
Day 362: macadamia oil
Day 363: coconut milk
Day 364: bamboo shoots
Day 365: anise hyssop
Day 366: gooseberry
Day 367: walnut oil
Day 368: akudjura
Day 369: wax beans
Day 370: apple flower
Day 371: sesame oil
Day 372: alexanders
Day 373: Italian beans

Day 374: Arabian jasmine
Day 375: avocado oil
Day 376: amchur
Day 377: Chinese cabbage
Day 378: arugula flower
Day 379: anise
Day 380: peanut oil
Day 381: chayote
Day 382: basil flower
Day 383: annatto
Day 384: daikon
Day 385: bee balm
Day 386: asa foetida or asafetida
Day 387: mustard greens
Day 388: borage
Day 389: barberry
Day 390: heart of palm
Day 391: burnet
Day 392: bay leaf
Day 393: escarole
Day 394: calendula

Day 395: bear's garlic
Day 396: radicchio
Day 397: carnation
Day 398: bergamot
Day 399: water chestnuts
Day 400: garden chives flowers
Day 401: black cardamom
Day 402: plantain
Day 403: garlic chives flowers
Day 404: black cumin
Day 405: celeriac
Day 406: garland chysanthemum
Day 407: black cohosh
Day 408: mung beans
Day 409: clover
Day 410: black lime
Day 411: navy beans
Day 412: cornflower
Day 413: black mustard
Day 414: sachu inchi seed
Day 415: dandelion flower
Day 416: blue fenugreek

Day 417: tatsoi
Day 418: day lily
Day 419: boldo
Day 420: mizunz
Day 421: dill flower
Day 422: Buddha's hand
Day 423: huckleberry
Day 424: English daisy
Day 425: calamus
Day 426: loganberry
Day 427: fennel flower
Day 428: candlenut
Day 429: yam
Day 430: fuchsia
Day 431: capers
Day 432: brambleberry
Day 433: gardenia
Day 434: caraway
Day 435: boysenberry
Day 436: geranium
Day 437: cassia
Day 438: camu camu berry

Day 439: gladiolus
Day 440: celery seed
Day 441: lion's mane mushroom
Day 442: hibiscus
Day 443: chameleon plant
Day 444: maqui berry
Day 445: hollyhock
Day 446: chaste tree
Day 447: freekeh
Day 448: hyssop flower
Day 449: chervil
Day 450: coffee fruit
Day 451: Japanese persimmon
Day 452: sweet cicely
Day 453: farro
Day 454: johnny jump up
Day 455: cress
Day 456: baobab fruit powder
Day 457: lavender
Day 458: cubeb powder
Day 459: lycii berry
Day 460: lemon flower

Day 461: curry
Day 462: seabuckthorn
Day 463: lemon verbena flower
Day 464: curry leaf
Day 465: ginger greens
Day 466: lilac
Day 467: echinacea
Day 468: Meyer lemon
Day 469: mallow flower
Day 470: elder
Day 471: blood orange
Day 472: marigold
Day 473: epazote
Day 474: ugli fruit
Day 475: marjoram flower
Day 476: filé powder
Day 477: Japanese honeysuckle
Day 478: mint flower
Day 479: fingerroot
Day 480: water spinach
Day 481: galangal
Day 482: mustard flower

Day 483: Ceylon spinach
Day 484: nasturtium
Day 485: gale
Day 486: Chinese broccoli
Day 487: okra flower
Day 488: ginseng
Day 489: crown daisy
Day 490: pansy
Day 491: grains of paradise
Day 492: katuk
Day 493: pea flower
Day 494: holy basil
Day 495: Joseph's coat
Day 496: pineapple flower
Day 497: hyssop
Day 498: Tonkin jasmine
Day 499: primrose
Day 500: juniper
Day 501: dragon fruit (pitaya)
Day 502: radish flower
Day 503: kaffir lime leaves
Day 504: yu choy

Day 505: redbud
Day 506: kokam
Day 507: long beans
Day 508: rosemary flower
Day 509: lemongrass
Day 510: sinqua
Day 511: runner bean flower
Day 512: lemon myrtle
Day 513: moqua
Day 514: sage flower
Day 515: lovage
Day 516: opo
Day 517: savory flower
Day 518: mace
Day 519: Napa cabbage
Day 520: snapdragon
Day 521: mahlab or mahaleb cherry
Day 522: rapeseed leaves
Day 523: society garlic
Day 524: marshmallow
Day 525: Chinese lettuce

Day 526: squash blossom
Day 527: mastic
Day 528: kudzu root
Day 529: sunflower (flower)
Day 530: mugwort
Day 531: thyme flower
Day 532: myrtle
Day 533: violet
Day 534: nettle
Day 535: yucca
Day 536: nigella
Day 537: olida
Day 538: pandanus flower
Day 539: pandan leaf
Day 540: paracress
Day 541: pepper rosé
Day 542: perilla
Day 543: poppy seed
Day 544: rue
Day 545: safflower
Day 546: salad burnet
Day 547: sea salt

Day 548: sassafras
Day 549: savory
Day 550: sichuan pepper
Day 551: silphion
Day 552: southernwood
Day 553: star anise
Day 554: sumac
Day 555: taramind
Day 556: tonka bean
Day 557: Vietnamese mint
Day 558: wasabi
Day 559: wattleseed
Day 560: white mustard
Day 561: black pepper
Day 562: white pepper
Day 563: zedoary
stop eating meat

qwerty -->

doctor's orders

doctor's orders

You may already have doctor's orders. Obey those orders. If you strongly disagree, seek a new doctor with more palatable orders.

You may find that your doctor's orders already include elements of this diet. If so, immediately implement your doctor's orders and follow up with the rest of this diet.

If you can afford to do so, have your doctor examine this diet and either approve it or modify it before you start using it. Follow any modifications made by your doctor.

You may speed up or slow down implementation of this diet.

You may skip steps that you are not ready for, although this may diminish the positive effect of the other changes.

Just as doctor's orders may jump steps to the front of the list, you may also start some things early. Understand that small refinements that come later in the process may have no effect until the larger issues are dealt with. Avoid the temptation to only do those parts that you find easy, as that will continue down the path of disaster to eventual death.

unhealthy typical diet

unhealthy typical diet

Standard American Diet (SAD)

The Western Pattern Diet emphasizes large amounts of red meat, sugary desserts, refined grains (especially corn, soy, and wheat), high fat foods (especially dairy products), high sugar drinks, and chicken eggs.

A 2006 survey of obese American adults revealed that 70% of these obese adults thought they ate a healthy diet! Obviously there is a great deal of confusion about what constitutes a healthy diet.

The typical diet plan in popular mass market diet books provide a list of easy to follow directions that a person follows for a short period of time. One to four weeks produces a temporary weight loss of five to twenty (5-20) pounds. This is typically water loss, but can be some other harmful effect.

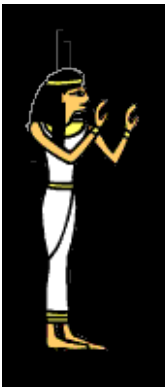
Most people can maintain a strict diet (even ridiculously strict) for an average of 21 days. Severely restrict any one (or more) essential macronutrient for 21 days and there will be almost certain weight loss. Some fad diets can cause longterm health damage along with temporary weight loss.

A short trendy diet is followed by a return to your normal habits. You regain the weight you just lost, plus a few extra new pounds as your body tries to recover from the drastic swings in diet it just experienced.

Pick another trendy diet and repeat the process, slowly yo-yoing to ever increasing weights

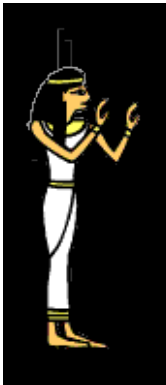
and ever decreasing healthiness.

“A wise man should consider that health is the greatest of human blessings.”
Hippocrates



healthy diet

healthy Goddess Diet



The Goddess Diet Plan is different. This is a long term plan for permanent life changes that allow you to bring out the Goddess within yourself.

With the Goddess Diet Plan, you learn about your body and apply time proven physical, mental, and spiritual changes that transform you into a manifestation of the Goddess of your choice.

The three basic Goddess archetypes are the Maiden, Mother, and Grandmother. There are a wide variety of Goddesses of each type from cultures all over the world. Pick one or more Goddess archetypes that are appropriate for you personally.

The Greeks divided the Maiden archetype into three kinds: Kore Persephone (the young woman seeking marriage and family), Kore Athena (the young woman pursuing a profession or craft), and Kore Artemis (the wild young woman, including lesbians, musicians, artists, and librarians).

Americans are accustomed to diets that involve counting. Counting carbs. Counting calories. Counting fat. Counting protein. Itemizing vitamins and minerals. Calculating glycemic indices.

In reality, what matters is the **quality** of the food eaten. A good diversity of high quality foods will tend to naturally result in a good diet, without having to do math.

changing habits

changing habits

The Goddess Plan takes into account that human beings are creatures of habit. You are going to create new habits. It is impossible to simply break an old habit.

As an exercise, for the next thirty (30) seconds, attempt to avoid thinking about pink unicorns. Really concentrate on avoiding thinking about pink unicorns. **Do this experiment now.**

You will find that the more you concentrate on not thinking of pink unicorns, the more you actually think about pink unicorns. No human being can break a habit through sheer will power.

Now for thirty (30) seconds, concentrate on thinking about black cats. Imagine a black cat. Picture the black cat in detail. Think about exactly what the black cat looks like. Think about exactly how the black cat acts. Concentrate completely on the black cat. **Do this experiment now.**

At the end of the second experiment you will notice that you did not think of the pink unicorn. Human beings can replace old habits with new habits.

The secret to success is to **replace** old habits with new habits, rather than attempting to simply break old habits through sheer will power.

changing day by day

changing day by day

Another problem with most diet and health plans is sudden drastic change. There is only so much that any one human can handle at one time.

If you overload yourself with too much to do (on top of your already busy life), then you will fail. You simply won't be able to keep up with it all. You will be overwhelmed and fail.

The Goddess Plan includes a daily plan of one healthy change a day. This is a manageable amount of change for most people. This is an amount of change that is sustainable for a lifetime. Each day you will improve your health and become sexier.

Basic nutritional information is interwoven with the specific diet change suggestions. Diet books typically present all of this information at once as an overwhelming mass of data. Spreading it out through the suggested diet changes allows you to learn nutritional theory at a steady pace at the same time you are making practical changes.

This daily plan assumes a reasonably healthy start. If you have are under medical care for a drastic, life-threatening condition, then you need to immediately follow your doctor's orders.

If you are reasonably healthy, you can start the Goddess Plan at any time.

Feel free to adjust the plan to your personal needs.

If you have special health needs, then modify the Goddess Plan to take into account your special needs. For example, if you are allergic to a specific food that is recommended by the plan, then use your growing knowledge of Kemetic Witchcraft and good health to design your own personal substitute that serves the same essential need.

If you already are practicing a healthier lifestyle, you may be able to skip over some steps, either because you are already doing them or because you are already doing a more advanced and healthier option. Of course, avoid becoming over-enthusiastic and attempting to do too much at once.

If you are struggling with a step (or a group of steps), you may want to slow down the pace of the plan, possibly making changes every other day or every few days instead of daily.

Adjust the Goddess Plan to your specific needs, body, and life.

Goddess may make additional modifications to this diet. You could be informed of these modifications through dreams, meditation, prayer, or other religious activity.

note:

Note that the day by day plan is being written more slowly than the days are passing. This is not a problem because the plan involves making long term changes for the better and you are encouraged to work at your own personal pace, which will probably be less than one change per day anyway. I currently have about four to five hours a week to write for the entire website. Please be patient.

explanations

explanations

The Goddess Plan provides for every step. Kemetic Witchcraft and the Goddess Plan are based on knowledge. Unlike the typical person who blindly follows whatever fad is popular at the moment, on the Goddess Plan you will learn why you are doing each step so that you can obtain the maximum positive health effects.

Science and mathematics were created by the ancient Egyptians as important religious elements.

The ancients (Babylonians, Romans, Greeks, Persians, etc.) all acknowledge that mathematics and science came from ancient Egypt. The modern word chemistry is named for the ancient Egyptian deity Khem.

Imhotep, architect of the first true pyramid, inventor of the scientific method, trigonometry, and medical triage, as a priest of Ptah proposed the scientific method as a foundational element of the Kemetic (ancient Egyptian) religion. Imhotep also was the first human to propose that mathematics was the actual underlying Divine Law and that the entire physical universe and everything and every activity in the universe could be explained by mathematical laws.

When Aristotle created Hellenism, a religion combining the Ancient Egyptian religion with the Greek religion, for Ptolemy I, Aristotle again affirmed that philosophy, science, and mathematics were core elements of the Hellenistic religion.

Just because some Christians reject science and specifically separate science from their religion, does not in any way negate the millennia of science and mathematics being basic and essential core parts of the Kemetic (ancient Egyptian) religion.

The Christian claim that science is not part of religion is religious belief by some but not all Christians and is not binding on other religions.

This knowledge will allow you to modify the Goddess Plan to fit your specific and unique body and life.

This knowledge will also allow you to function better as a Kemetic Witch and give appropriate advice to others who seek out the counsel of a Wise Woman or Shaman.

hitting bottom

hitting bottom

Every individual has a different personal bottom. This is the lowest point where you finally realize you have a serious problem you can no longer ignore your problem and you finally take realistic actions toward recovery.

You may have had severe diet-induced health problems, such as diabetes, heart attack, stroke, organ transplant, or cancer.

You may simply be on the path to major, life-threatening conditions and realized that you don't want to be any fatter, more tired, or less healthy.

Everyone has a different bottom. If you have not yet reached your personal bottom, you will only dabble at solutions rather than make the long-term commitment to healthy eating.

intelligence

intelligence

This disaster recovery diet assumes that you are willing to use your native human intelligence. You will have to consciously think about what you eat and plan accordingly.

Common sense simply is not common.

90,000 years

For approximately the first 90,000 years of the existence of the modern human, our ancestors continued to use the technology of our immediate predecessor. We didn't start using our flashy new modern brains until we got our asses kicked by Neanderthal in what is now Israel/palestine.

As we attempted to emerge from Africa, we came up against a similar species that used the exact same weapons technology (especially spears and axes intended for hand-held use). Neanderthal was bigger and stronger than we are. They easily chased us back to Africa.

Some of our ancestors used their modern brain and came up with a new design for spears that could be thrown.

In the next clash we easily defeated Neanderthal because we could strike at a distance, defeating them before they could use their superior strength and size advantages.

We eventually chased Neanderthal out of Europe. This was accompanied by an explosion of new technologies, including the introduction of art and civilization.

It took us modern humans 90,000 years with our modern brain before we hit bottom and started using it.

applying intelligence

This disaster recovery diet assumes that you are among those humans who are willing to actually use your flashy new modern human brain. That you are willing to think. That you are willing to plan. That you are willing to take positive action and control over your own health.

You have to be willing to read. Less than 10% of adult Americans are “regular readers”. Regular reader being defined as someone who reads at least once a week for some reason other than school or work. And that once a week can be something as simple as reading a single comic strip!

As one of the first four people to have independently discovered writing, both reading and writing are important factors in the Kemetic (ancient Egyptian) religion. The hieroglyphs were called medu neter, which literally means Divine Writing or the Writing of Goddess. Seshat or Sothis created the medu neter and Djehuti or Thoth taught writing to humans. The library was invented in ancient Egypt. The Great Library at Alexandria was a temple to Serapis, the deity of wisdom.

While this does count as educational reading, you will have to be more willing to read and think than the average human.

Are you ready to use your brain to save you own life?

seven year diet plan

seven year diet plan

This is a seven year to life diet plan. That number is based on cellular activity. It will take approximately seven (7) years for your body to recover from your previous eating habits.

Once you have recovered, it would be wise to continue healthy eating for the remainder of your life.

While this diet concentrates on the recovery phase, you will learn the principles for long term, sustainable healthy eating.

fad diets

fad diets

There are more than 28,000 different diets in the English language. The vast majority are fad diets.

Most fad diets are based on some kind of starvation.

Humans can exhibit extreme discipline for short periods of time. Most anyone can go on almost any extreme diet, no matter how extreme, for a short period of time (typical endurance is about three weeks).

Most fad diets starve the body of one key nutrient. Over a period of about three weeks, any kind of starvation will result in noticeable (often impressive) weight loss.

Unfortunately, there are harmful effects from these short periods of starvation. The harmful effects vary depending on the kind of starvation. Some of these cause long-term damage to the body

In the worst cases, the long-term damage actually causes the body to change at a cellular level. These changes cause the normal American unhealthy diet to become even unhealthier! The body changes the way it processes food and you end up worse than you were before the fad diet.

super foods

super foods

The idea of super foods is a fallacy.

No single food meets all human nutritional needs. No single food by itself can make a person healthy, especially if mixed into an otherwise unhealthy diet.

Further, many of the proclaimed super foods are exotic and very expensive. Typically, the same nutrients (often in greater quantity) can be found in less expensive foods or a combination of less expensive foods.

You will find some of the famous exotic super foods on this list, but not as single super hero main components of your diet, but as one of many different food items that you should eat throughout the year.

healthy eating

healthy eating

Chances are that you already have a general idea of what is healthy eatng. You probably don't know allthe details. You probably have some mistaken beliefs. But you generally know what is healthy and what isn't.

As you read this diet, apply your general common sense knowledge. Think and test for yourself whether or not this is reasonable.

We have three major goals:

- (1) Remving unhealthy foods.
- (2) Adding healthy foods.
- (3) Getting the correct proportions of healthy foods to match you personal dietary needs.

You may notice that this material suddenly and abruptly ends. That is because I am still transferring the information into writing.

Return weekly (or even every few days) and you will find more information has been added.

To your good health.

servings/portions

servings/portions

The ideal for a human is continual eating while travelling long distances, with an occasional stop for a cooked meal. We are designed by Goddess to be long distance walkers and runners. In the hunter-gether days (which actually were primarily gathering and gardening supplemented with fishing and trapping, with hunting being fairly rare), a family or tribe would typically travel a thousand to three thousand miles per year on a regular circuit, gathering in larger groups at selected times of the year when the local bounty could support a larger group.

Goddess designed our bodies for long distance walking and running. We can sweat while exercising, allowing continued long term physical exertion. Our big butts, legs, backs, and other features are structured for long distance walking and running. We can walk and run continuously for longer than any other species on the planet.

The switch to a few large meals came with the agricultural revolution. Our bodies are not designed for that eating model.

It may be difficult in a modern urban society, but it is best to switch to five to seven small meals a day, with additional snacking in between.

It is important to note that this is not the same as adding a bunch of meals and snacks to the three large meals of Western society.

Eat the same amount of food (assuming you are eating the correct amount of food for your size, age, gender, and body), but spread it out more evenly through the day.

The first meal of the day, breakfast, is the most important meal of the day and should generally be the largest meal of the day.

A noon time or mid-day lunch can also be a bit larger meal than the others, but not as large as in the urban three meal practice.

Feast meals are special occasions and may involve more food than normal for a single meal. Adjust that day's other meals accordingly.

The four major macronutrients are: water, carbohydrates, proteins, and fats. The exact

proportion needed varies by body type. You can use Ayurveda to determine your body type. It is important to match the proportions of carbs, proteins, and fats according to your individual body type. Experiment and learn the correct balance for yourself.

Generally, carbohydrates should account for 40-65% of your diet, proteins 10-35%, and fats 15-35%.

The following recommendations are ordered from least eaten to most eaten, in the pattern of a food pyramid (even though I don't yet have a cool full color food pyramid picture available yet).

Meats: Maximum of twice a week, preferably no more than once a month. At the highest level of Goddess diet, these are entirely removed.

Sweets: Maximum of 75 calories a day. Preferably less often. Healthy sweets such as plain dark chocolate, unsweetened dried fruit, fruit sorbet.

Alcohol: Optional maximum of one glass of red wine or one glass of beer or ale per day. No alcohol is better.

Fats: 2-5 daily servings (adjusted for your body type).

Poultry, Eggs, Cheese, Yogurt, and Dairy: Once a day to once a week (once a week is better). At the highest level of the Goddess diet, these are removed entirely.

Fish and Seafood: Once a day to twice a week. At the highest level of the Goddess diet, these are removed entirely for the Seth variation (which is purely vegan), but remain for the Heru Sa Aset (Horus) and Aset (Isis) variations.

Vegetable Oils: A good mixture of quality oils daily, including olive oil at least once per day and hemp seed oil at least once per day.

Daily Physical Exercise: at least 30 minutes a day

Mushrooms: Eat a variety of cooked mushrooms daily, particularly Asian mushrooms. Do not eat raw mushrooms.

Fruits: unlimited (minimum of 3 servings daily). Fresh in season, supplemented by frozen and dried.

Vegetables: unlimited (minimum of 4 servings daily). Both cooked and raw (emphasis on raw), from all colors of the spectrum.

Legumes, Beans, Seeds, Nuts and other Protein-rich plants: five servings a day (adjust for body type, 3-7 servings a day)

Grains: 6 servings a day. A variety of whole grains, rice, noodles, breads, millet, corn. Pasta

(al dente) can be eaten two to three times a week.

Tea: Drink green tea and/or herbal teas daily for a total of two to four cups a day, supplemented by alkaline water and pure fruit juices.

Seeds, Herbs, and Spices: Use for every meal. Unlimited quantities of herbs and spices. Emphasize basil, chives, cilantro, cinnamon, cloves, coriander, garlic, ginger, mint, oregano, parsley, peppers, rosemary, thyme, turmeric.

Social Eating: Share and enjoy meals with others.

social eating

social eating

Eating in a social setting is an important part of a proper diet.

Eating habits tend to transfer. Surround yourself with people who have good eating habits and you will tend to have good eating habits yourself. Surround yourself with people who have bad eating habits and you will tend to have bad eating habits yourself.

Social talking will slow down the eating process, resulting in more time for your body to give you appropriate signals about fullness, resulting in better portion control.

Socializing while eating will also help your body better digest the foods that you eat. Goddess created humans as social animals. Our bodies need social activity to remain healthy.

Three enthusiastic kisses a day will burn three pounds of fat a year.

overweight and obesity

overweight and obesity

Two of the most common health problems in the U.S. and the Western world in general are overweight and obesity (a more extreme version of being overweight). Yes, the phrase “overweight and obesity” sounds strange and seems to break a basic grammatical rule, but this is the way the medical profession actually refers to these two health problems.

Overweight and obesity can be cured with diet and exercise.

According to the U.S. government's Centers for Disease Control and Prevention, overweight (BMI of 25 or higher) and obesity (BMI of 30 or higher) are risk factors for developing: coronary heart disease, type 2 diabetes, cancers, hypertension (high blood pressure), dyslipidemia, stroke, liver disease, gallbladder disease, sleep apnea, respiratory problems, osteoarthritis, and gynecological problems (including infertility).

The Goddess Diet Plan directly addresses all but the most extreme cases of overweight and obesity. If you are too heavy to leave your home then you need immediate medical intervention to save your life.

The major goals for treating overweight and obesity:

- Cut fat intake.
- Exercise.
- Cut sugar intake.
- Cut salt intake.
- Switch from processed foods to whole natural foods.
- Take care with carbohydrates, emphasizing low glycemic index.
- Eat whole grains and fiber rich fruits and vegetables.

- Limit or stop eating meat.

pre-diabetes and diabetes

pre-diabetes and diabetes

Diabetes is divided into three groups: type 1 (requiring insulin treatment), type 2 (which can be controlled by diet and exercise alone), and gestational diabetes (pregnant women and their babies).

Pre-diabetes is a condition where the body's ability to produce insulin is compromised but not yet to the levels of diabetes.

Diet and exercise can cure pre-diabetes. Diet and exercise are used to control diabetes. Only in very rare cases has diet actually cured diabetes.

There is a huge amount of debate about what is the proper diet for diabetes, although some things (especially reducing sugar and simple carbohydrate intake) are common.

The **American Diabetic Association** recommends watching the Glycemic Index (G.I.), eating lots of fruits and vegetables, emphasizing non-starchy vegetables, 60-70% carbohydrates, limiting alcohol, watching fats (and emphasizing good fats), lean meats, fish, and plant sources for protein, non-fat dairy, eliminating sugary drinks, and cutting back on high calorie snacks and desserts.

The **Pritikin Program** created by Nathan Pritikin in 1976 emphasizes carbohydrates and fiber, with fresh fruit, vegetables, and whole grains.

The **G.I. Diet** counts the Glycemic Index (G.I.) of foods and emphasizes low G.I. foods. Although originally researched for diabetes, this is not a diet specifically for diabetics. The principles of a G.I. diet are useful for many other persons.

The **High Fiber Diet** emphasizes plants high in fiber.

The **Zone Diet** created by Barry Sears emphasizes a balance of 40% carbohydrates, 30% proteins, and 30% fats. This is not a diet specifically for diabetics.

The **Paleolithic Diet** calls for foods that were common in the pre-agriculture paleolithic period. This is not a diet specifically for diabetics. This diet is not safe for the long term.

The **Vegan Diet** is part of a philosophy of not using any animal products, not just in food but also in clothing and other parts of life. This is not a diet specifically for diabetics.

The **Raw Foods Diet** emphasizes uncooked raw whole foods, usually plants. This is not a diet specifically for diabetics.

The **Goddess Diet Plan** with some minor modifications is appropriate for most diabetics.

The major goals for treating pre-diabetes and diabetes:

- Limit sweets.
- Eat often (lots of small meals).
- Take care with carbohydrates, emphasizing low glycemic index.
- Eat whole grains, fruits, and vegetables.
- Limit fat.
- Limit alcohol.
- Exercise.

Some of the causes of diabetes include: deficiency of chromium.

Diabetes is one of the conditions reported by the state of California as grounds for insurance companies to charge unreasonably high premiums or to outright reject providing health insurance, according to a front page article by Lisa Girion in the December 31, 2006, *Los Angeles Times*.

Cinnamon helps lower plasma glucose levels in patients with poorly controlled type 2 diabetes, according to research at the Beltsville Human Nutrition Research Center in Maryland. One-half to three teaspoons of cinnamon a day improves blood glucose, triglycerides, and fats after just 40 days.

Garlic may help prevent type 2 diabetes.

Recent research shows that sage can be useful as a treatment for type 2 diabetes.

celiac disease

celiac disease

Those with celiac disease experience food reactions to gluten.

Celiac disease is a serious autoimmune disease that occurs in genetically predisposed people where the ingestion of gluten leads to damage in the small intestine. It is estimated to affect 1 in 100 people worldwide, but only about 30% are properly diagnosed. —[Celiac Disease Foundation](#)

When people with celiac disease eat gluten (a protein found in wheat, rye, and barley), their body mounts an immune response that attacks the small intestine. These attacks lead to damage on the villi, small fingerlike projections that line the small intestine, that promote nutrient absorption. When the villi get damaged, nutrients cannot be absorbed properly into the body. —[Celiac Disease Foundation](#)

Celiac disease is hereditary, meaning that it runs in families. People with a first-degree relative with celiac disease (parent, child, sibling) have a 1 in 10 risk of developing celiac disease. —[Celiac Disease Foundation](#)

Celiac disease can develop at any age after people start consuming gluten. Left untreated, celiac disease can lead to additional serious health problems. —[Celiac Disease Foundation](#)

food allergies

food allergies

People can develop food allergies at any age. Some food allergies can be fatal.

heart disease and stroke

heart disease and stroke

Diet and exercise can prevent heart disease and stroke, as well as help in recovery.

Major risk factors for heart disease and stroke include: hyperinsulinemia, obesity, high blood pressure, high cholesterol, smoking tobacco, and drinking alcohol.

The Goddess Diet Plan with some minor modifications is appropriate for heart disease and stroke prevention and recovery.

The major goals for treating heart disease and stroke:

- Exercise.
- Stop eating meat.
- Cut back on salt.
- Cut back on sugar.
- Cut back on fat.

cancer

cancer

Diet and exercise can help prevent some kinds of cancer. Diet and exercise can help support stronger treatments for cancer but can not cure cancer.

Major risk factors for cancer include: obesity, exposure to toxic chemicals, smoking tobacco, and drinking alcohol.

The Goddess Diet Plan with some minor modifications is appropriate for cancer prevention and recovery.

The major goals for treating and preventing cancer:

- Completely stop eating red meat, egg yolks, and organ meats.
- Cut back on omega 6 essential fatty acids.
- Increase activated omega 3 essential fatty acid (EPA).
- Reduce insulin levels.
- Restrict total calorie intake (without sacrificing protein).
- Eat fiber rich fruits and vegetables.

addictions

addictions

The harmful effects of many addictions are so great as to overwhelm any changes in diet.

If you have a currently active feeding addiction to tobacco, opiates, heroin, alcohol, speed, tranquilizers, barbituates, cocaine, or other similar substances, then you are not ready for this diet (although it will help in the recovery *after* you have stopped actively feeding the addicition).

If you simply have excesses of alcohol, sugar, salt, or similar problems, this diet will help you with the excess. But if you have an addiction, solve the addiction before starting this diet.

If you have a sugar and/or salt addiction, then this diet will help you end the addiction.

Sugar and salt addictions often happen as a connected pair.

You should move away from refined sugar, artificial sweetners, and other sweetners as rapidly as is safe for your body regardless fo whether or not you have a sugar addiction.

If you have a sugar addiction you should completely stop the use of refined sugar. Ever.

You should move away from ordinary table salt as rapidly as is safe for your body regardless fo whether or not you have a salt addiction.

If you have a salt addiction you should completely stop the use of table salt. Ever.

tobacco

tobacco

Tobacco features nicotine, one of the most addictive substances known, more than twice as addictive as heroin.

A common American reason for acidosis (acid overload) is the nicotine in tobacco.

Quitting isn't easy. Quitting is esential.

Day 1: dedication

dedication

The first and most important part of the entire Goddess Plan is your dedication to success.

If you don't make a commitment, there is very little chance of success.

The dedication can be very simple (such as writing down your goal in a pocket-size diet and exercise diary) or very complex (such as full Witchcraft ritual), or anything in between.

This dedication can involve the divine, such as the ancient Egyptian Ntr and neteru, the Hindu Krishna and Radha, the Jewish Yahweh and Asherah, the Roman Isis and Diana, the Zoroastrian Ahura Mazda, the Christian Jesus and Mary, the Islamic Allah, the Wiccan Lord and Lady, or any other religion's deities or leaders.

For members of the Kemetic (ancient Egyptian) religion, this dedication is to Neter and any other deities that have called you.

The important thing is to formally dedicate yourself to the goal of being a healthy and sexy Witch in a year.

blessing food

blessing food

Blessing food is the most important part of the Goddess Diet Plan. You can adjust this blessing for your religion and your deity or deities.

Success in the Goddess Diet Plan requires the active participation and assistance of the Divine. Only with the help of Goddess who created and gave birth to this universe and all other universes can you succeed in being spiritually, mentally, and physically healthy.

Thank Goddess when you acquire food.

Thank Goddess when you prepare food. Make sure that the Divine energy is infused into your cooking.

Specifically ask Goddess to bless all food that you prepare.

Thank Goddess prior to eating your meal or any time you eat food. Ask Goddess to bless your food, your family, and your guests.

After eating, thank Goddess for the food you have received.

For those of you looking for a more scientific reason, blessing food and thanking Goddess centers you and puts you into the moment, lowering your heart rate, blood pressure, and stress levels.

rich and poor

the health and dietary effects of wealth and poverty

Poor persons may have trouble following this diet. The policy of the U.S. government since the Great Depression has been to provide incentives for cheap junk food to prevent widespread hunger. This policy prevents revolution and riots driven by widespread hunger. This policy also makes poor people obese and creates food-driven diseases and ailments that greatly shorten life expectancy, lowering the amount of money the government has to pay out on social security programs.

Those on a restricted budget will find that most of easily obtained low cost foods are bad for human health. There are great foods available at low cost, such as bags of whole beans and bags of whole grains. The trade-off is increased preparation times.

Obtaining a crock-pot or slow cooker will allow the poor to spend long hours at low-paying jobs (often more than one job a day), but still return home to high quality foods.

The rich often have the opposite problem of eating to impress. Many of the most expensive foods are horribly unhealthy. These include fancy steaks and super sugary desserts.

The rich can easily afford extreme excesses of meats and extreme excesses of sugar desserts.

My grandfather was a photographer for *the New York Times*, *Saturday Evening Post*, and *Life* magazine (including as a war correspondent in World War II). His meals were covered by an expense account, effectively allowing him to eat like a rich person. Coming from a poor background, he ate whatever was the most expensive item on the menu, which typically was some kind of steak. He developed a taste for expensive cuts of meat. Decades of eating expensive steaks eventually led to three heart attacks. After the first heart attack he rather quickly returned to his previous diet simple because he loved the food he was accustomed to eating. After the second heart attack he radically changed his diet. Unfortunately the damage was too severe and the third heart attack killed him.

It is wise for the rich to refrain from excess.

Day 2: morning water

morning water

Water and morning water are sacred to Aset (Isis). Honor and thank Aset for water.

From this day on, always start each day by drinking a glass of warm water. You may optionally include fresh squeezed lemon or lime juice.

Obtain organic fresh ripe lemons or limes. Bright green limes are *not* ripe. Ripe limes have started to yellow.

Drink the lemon or lime juice in your morning water within 10 minutes of squeezing the juice.

Store lemons and limes at room temperature on a counter that receives sunlight. Do *not* refrigerate lemons or limes. Use lemons and limes within three days. Check twice daily for spoilage.

The purpose is to rehydrate your body after a full night's sleep.

Throughout the night, your body is using up its supply of water, but isn't receiving any new water. By the time you wake up, your body is in serious need of water, one of the most vital of all essential nutrients.

As soon as you get up, drink a glass of warm water and immediately get new water into your body. You will learn more about the importance of water and proper hydration later in the Goddess Plan.

The reason the water is warm is to gently raise your core body temperature. It is normal for

your body to reduce its temperature while you sleep. By gently raising your core body temperature, you invigorate your body and help yourself wake up ready to take on the challenges of your day. This is also in keeping with the principle of yang foods and beverages in the morning (see [below](#)).

The lemon or lime juice adds vital minerals and other micronutrients that your body has used up during the night. It is important to use fresh squeezed fruit juice, not pre-packaged juices. If you must start with pre-packaged juices, switch to fresh-squeezed live juice as soon as possible.

Advanced version: In the advanced version, take two glasses of warm water first thing in the morning. Add lemon or lime juice to the second glass of water. Switch to the more advanced version at your own pace.

This is a very easy starting habit, but an important one.

macronutrients

macronutrients

There are four macronutrients: water, carbohydrates, fats, and proteins. Note that some nutritionists place water in a category by itself, leaving three macronutrients.

Lack of water can kill in hours (typically a few days).

Lack of the other three macronutrients can kill in weeks or months (depending on conditions).

Insufficient amounts of macronutrients can create a huge variety of health problems. Similarly, an overload of any macronutrient can also produce a wide variety of health problems.

Your body needs 40-65% carbohydrates, 10-35% proteins, and 15-35% fats.

Dr. Barry Sears, Ph.D., author of the popular Zone series of diet books, claims to have scientifically verified that the ideal percentages are 40-30-30 (40% of your diet should consist of carbohydrates, 30% should be proteins, and 30% should be fats).

Day 3: water

water

Water is sacred to Aset (Isis) and Tefnut. Honor and thank Aset and Tefnut for water.

Drink at least eight 8-ounce glasses of water a day. Twelve glasses of water a day is better.

One plan for getting enough water is to drink a glass of water every hour on the hour from when you wake up until sunset.

Water is the most important of the macronutrients.

At birth the human body is up to 90% water. A typical adult human has about 70% water. The elderly can drop to 60% water as their body loses the ability to retain water. Human blood is about 94% water.

You should get significant amounts of water within the food you eat, especially if you eat raw fruits and vegetables.

Most Americans drink too little water. Many Americans confuse the feeling of thirst with the feeling of hunger and feed themselves food when their body is really craving water. This is why many diets include drinking water as the first response to feeling hungry. If the problem was thirst, drinking water will solve the mistaken feeling of “hunger” (which was really the feeling of thirst).

But you shouldn't wait until you feel thirsty to drink water. By the time you feel thirsty your body has already lost at least 1% of its total water.

Drink plenty of water throughout the day, fairly evenly spaced. You can drink some of your water as healthy teas.

Do *not* drink lots of any fluid while eating a meal. Large quantities of water can dilute the stomach enzymes and acids, reducing the ability to digest properly, resulting in less nutrients being absorbed into the body.

It is best to drink a small quantity of water shortly before a meal (typically about 10 minutes before eating) and drink nothing or just drink sparingly while eating.

If you give in to a craving and eat something that you know is bad for you, you can immediately drink plenty of water to partially limit the harm. The excess water will mean less is absorbed into the body, reducing the harm of a bad food choice.

exercíse

exercise

Which fits better in your busy schedule: one hour a day of exercise or 24 hours a day of being dead?

A 2006 survey of obese American adults revealed that 40% of these obese adults thought they engaged in vigorous exercise at least three times a week! Obviously there is a great deal of confusion about what constitutes vigorous exercise.

Proper exercise is an important part of good health. Many Western women try to control their health through diet alone. While diet does have a powerful effect on health, it is *not* the only component of good health. Good exercise is important for both physical and mental health (you will feel better about yourself after a good workout).

You may be interested in the old Canadian Royal Air Force [5BX exercise plan for men](#) and [XBX plan for women](#) (please read the disclaimers and modern advice added at the website).

Yoga can be an important part of any healthy exercise routine.

Day 4: hemp seed oil

hemp seed oil

Oil of the *cannabis* plant.

Hemp seed oil is sacred to Bast. Honor and thank Bast for hemp seed oil.

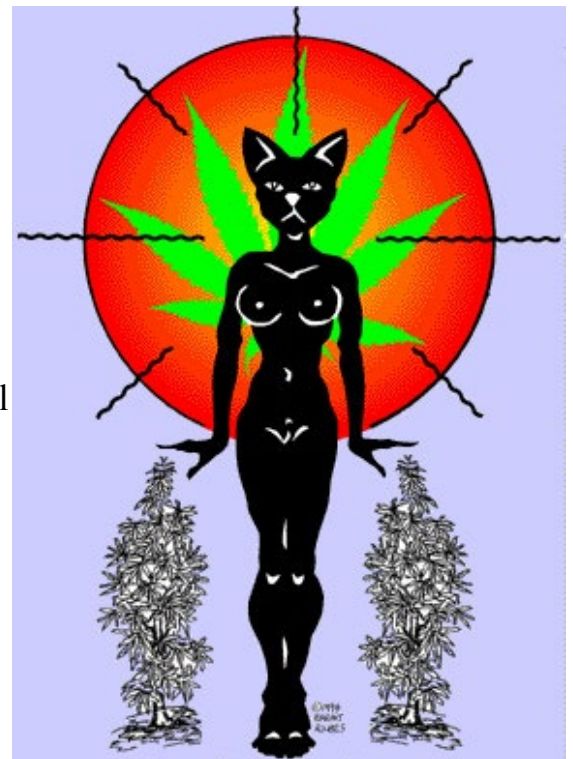
Hemp is also associated with the Chinese Hemp Maid Ma Gu.

Eat one (1) to two (2) tablespoons of hemp seed oil a day. The total of hempseed oil and flaxseed oil and olive oil should not exceed two (2) to three (3) tablespoons a day.

Hemp seed oil is too fragile for cooking. The oil's delicate omega-3 essential fatty acids will oxidize under exposure to heat, air, or light. Use for salad dressings, drizzles on prepared foods, herbal/seasoned oil dips, and similar cold oil uses. Always store hemp seed oil in an opaque container in your freezer (the oil won't freeze at normal freezer temperatures, but will last up to a month).

On days when you use olive oil, flax seed oil, or other nutritional oils (as contrasted with using oils as cooking oils), cut back to one (1) tablespoon of hemp seed oil.

Hemp seed oil has all of the Essential Fatty Acids (EFA) the human body must receive from food in order to remain healthy.



Further hemp seed oil is the only naturally occurring oil that has the exact proportions of omega-3 and omega-6 Essential Fatty Acids needed by the human body. With all other oil choices, you must blend oils to obtain the correct proportions. This indicates a long term (at least 10,000 years) symbiotic relationship between humans and the cannabis plant (or divine intervention).

Nobody in history has ever died of an overdose of hemp seed oil.

Note that hemp seed oil is made from the same cannabis plant that produces marijuana. While hemp seed oil (or any other part of the hemp seed) contains no THC, it does contain natural cannabinoids. Inexpensive drug tests check for cannabinoids rather than THC and will therefore present a false positive if you consume hemp seed oil for nutritional, health, and/or religious purposes.

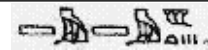
botanical information:

Cannabis hemp is a dioecious plant (meaning that an individual plant can be male or female). Both male and female hemp plants produce good quality fiber, but the female produces the best religious quality cannabinoids.

Botanical name: *Cannabis sativa* or *Cannabis indica*

Common name: cannabis, hemp, marijuana

- *Cannabis indica* shorter plant and thicker leaves than sativa
- *Cannabis ruderalis* lower quality plant commonly known as “dirt weed”
- *Cannabis sativa* taller plant and thinner leaves than indica



shem-shem-tu

sm-sm-t

hieroglyphs for cannabis

origin:

Origin: The place of origin of cannabis hemp is unknown, but is believed to have been somewhere in Asia, possibly in Benghali India.

Cautions and contraindications: Cannabis is **safe**.

The DEA's own conservative administrative law judge, Francis Young, after taking medical testimony for 15 days and reviewing hundreds of DEA/NIDA documents positioned against the evidence introduced by marijuana reform activists, concluded in September 1988 that “marijuana is one of the safest therapeutically active substances known to man.” —*The Emperor Wears No Clothes*, Jack Herer

carbohydrates

Your dietary intakes should be about 40-65% carbohydrates. The exact proportions needed vary from person to person.

Your body needs 40-65% carbohydrates, 10-35% proteins, and 15-35% fats.

Dr. Barry Sears, Ph.D., author of the popular Zone series of diet books, claims to have scientifically verified that the ideal percentages are 40-30-30 (40% of your diet should consist of carbohydrates, 30% should be proteins, and 30% should be fats).

Carbohydrates include starches and sugars.

Starch-rich foods should make up about half your diet. Examples of starch-rich foods are: bananas, pulses (especially peas), root vegetables, beans, and whole grains.

Organic Labels: The Bush administration's USDA has announced that they will help large American food corporations increase their profits by purposely deceiving the American public by putting non-organic foods into foods labelled as being organic. Under U.S. law, for foods to be labelled as organic, crops must be grown without chemical fertilizers, sewage sludge, bioengineering, or pesticides and animals must be raised without antibiotics and growth hormones and given access to the outdoors. The USDA has decided that 43 non-organic ingredients can be added to foods labelled as organic. To protest this decision, go to [Organic Consumers Association](#). Among the non-organic ingredients are **two starches**.

starch-rich foods

- bananas
- beans
- grains
- peas
- pulses
- root vegetables
- whole grains

Day 5: beverage choices

beverage choices

An important matter is making better beverage choices. This is one of the very first things to fix in your diet (if you don't already make good beverage choices).

Most of these choices will be discussed in more detail in the entries for future days on the Goddess Diet Plan, but a short, general discussion is included here.

Drink an 8-ounce glass of still water once an hour until sunset. The water can be sipped over an extended period of time. Later into the Goddess Diet Plan, switch to eight 8-ounce glasses of water, tea (herbal or green), or 100% pure organic fresh squeezed fruit juice during the daytime (your choice of which liquid).

Teas and pure fruit juices should be a daily part of your diet.

The following beverage choices should be eliminated or greatly reduced: alcohol, apple juice bought from cartons, beer, coffee, cow's milk, cranberry juice (except when medically called for), energy drinks, fruit juices bought from cartons, hot chocolate made with cow's milk, instant hot chocolate, milk shakes made with cow's milk, orange juice bought from cartons, smoothies made with cow's milk, sodas, water flavored with artificial sweeteners or ingredients, wine.

The following beverages should be reduced (and eventually eliminated), but can be used during the transition to healthier beverage choices: black tea and decaffeinated coffee. Also during the transition you may use store-bought carton based orange, apple, or fruit juices that are diluted with 50% water.

Replace cow's milk with goat's milk or plant milks (especially soy, rice, almond, or hemp). Use plant milks for milksaahkes and smoothies.

Replace coffee first with watered down coffee and then with green tea, herbal teas, rooibos tea, ginger tea, or dandelion coffee.

Replace store bought carton based orange, apple, and fruit juices first with 50% water dilution and then with fresh homemade fruit and vegetable juices and smoothies.

Replace black tea with green tea, herbal tea, chamomile tea, fennel tea, ginger tea, nettle tea, peppermint tea, and rooibos tea.

stretching exercises

stretching exercises

On this day of the Goddess Plan, you will start exercising. If you are already exercising, you can add these recommended exercises to your regular routine.

The first exercise in the Goddess Plan is the **bend and reach**. The bend and touch is one of the most basic stretching exercises. There are more advanced versions of this exercise that you may want to use later in the Goddess Plan.

Stand up straight in a relaxed erect position, with your feet about shoulder width apart. Lift your arms over your head. Bend forward to touch the floor or ground between your feet. Return to the starting position. Each return to the starting position counts as one repetition of the bend and reach.





If you have not been exercising, only attempt one repetition of the bend and reach exercise. You will eventually want to build up to between 10 and 30 repetitions of the bend and reach exercise. Do not increase your number of repetitions by more than one additional repetition per day. It is important to avoid straining or damaging your muscles by over vigorous physical activity beyond your current abilities. It is essential to build up any new exercise slowly over days and weeks.

Do not lock your knees straight. Keep your knees loose. On the other hand, do not go into deep knee bends. Both extremes are harmful to delicate tissues in your knees and locking your knees can block blood flow, resulting in fainting.

For those who are new to exercise, especially if overweight, do not worry if you can't actually touch the ground yet. Bend down as far as you can comfortably bend. It is important to avoid any pain. This exercise should never hurt. Over a week or two build up to three to five repetitions of this exercise without worrying about actually reaching the floor. Once you have reached three to five repetitions, stop increasing the number of repetitions and work on getting closer to the floor. Again, do not stretch beyond your abilities (because that can damage muscle, ligaments, and other tissues). Take as long as you need to build up to the point where you can actually touch the floor. Once you have successfully touched the floor, you can start increasing the number of repetitions (not more than one new rep a day).

Move slowly and deliberately. You are attempting to gently stretch and warm up your muscles and soft tissues in preparation for other exercises. Fast movements defeat the purpose of gentle stretching. Fast movements tear and rip rather than stretch. It is tempting to move quickly, as the momentum will jerk your body into a greater reach with more ease, but this temptation must be avoided to prevent serious damage.

Any exercise program requires a period of warm up and stretching exercises before attempting more vigorous exercise. Jumping right into vigorous exercise will damage muscles, ligaments, and other tissues.

In addition to gently stretching muscles and ligaments, the bend and reach exercise also helps keep the back bone flexible. A flexible back is an essential key to good health. If your back is stiff and inflexible, it will interfere with free movement and proper exercise, as well as block kundalini and the flow of energy through your chakras. It is impossible to be fully healthy and fit

without a flexible spine.

Day 6:

processed foods

processed foods

In general, the less processed a food is, the healthier it is. There are exceptions. Some foods can't be eaten unless they are cooked. Some foods are improved nutritionally when processed. But in general, whole foods are healthier than processed foods and raw foods are healthier than cooked foods.

Don't eat foods that your ancestors wouldn't recognize as food. Food manufacturers now make food-like substances, mostly from cheap processed ingredients such as corn syrup and soy pastes, laced with dozens of potentially toxic chemicals, and loaded with sugar, salt, and fat. Especially sugar, salt and fat, because those flavors trigger evolutionary desires and help cover up the nasty taste of the cheap ingredients and chemical stew.

In particular, cut out or reduce the use of "white stuff": refined sugar, refined salt, and refined flour.

Reduce or eliminate junk food, including cakes, chocolates, French fries, ice cream, potato chips, and other sweets.

Reduce or eliminate all ready-made meals (frozen, microwave, etc.).

Reduce or eliminate any foods labelled "diet", "low-fat", "fat-free", or "99% fat-free".

walking

walking

Walking is a form of aerobic exercise. Regular walking is one of the best ways to move towards healthiness.

Jogging is harsh on the knees. Running and walking are natural motions.

Walking in a pool adds bouyancy that can assist those who might otherwise have difficulty walking.

Walking is good for you. Human beings were designed as long range walkers and runners. Humans are actually the best long distance walker of all the animal species on the planet Earth.

A common health suggestion is to walk at least 10,000 steps every day. This is a good goal for those who have had limited recent exercise.

Count your current number of steps a day. This is best done with a pedometer. There are smart phone apps that act as a pedometer.

Use your current regular number of steps a day as a starting point and each day try to add more steps at a pace you can handle without becoming discouraged and especially without hurting yourself. Stop if you feel any pain.

A better health goal is at least a half an hour to an hour of dedicated walking a day for at least four days a week (or equivalent motion, such as running).

Walking is a form of aerobic exercise. Regular walking is one of the best ways to move towards healthiness.

Jogging is harsh on the knees. Running and walking are natural motions.

Walking in a pool adds bouyancy that can assist those who might otherwise have difficulty walking.

Day 7: artificial sweeteners

artificial sweeteners

Completely eliminate all artificial sweeteners from your diet.

carbohydrates

carbohydrates

Carbohydrates include starches and sugars.

nutritional information:

Your dietary intake should be about 40-60% carbohydrates. The exact proportions needed vary from person to person.

starch-rich foods

- bananas
- beans
- grains
- peas
- pulses
- root vegetables
- whole grains

Organic Labels: The Bush administration's USDA has announced that they will help large American food corporations increase their profits by purposely deceiving the American public by putting non-organic foods into foods labelled as being organic. Under U.S. law, for foods to be labelled as organic, crops must be grown without chemical fertilizers, sewage sludge, bioengineering, or pesticides and animals must be raised without antibiotics and growth hormones and given access to the outdoors. The USDA has decided that 43 non-organic ingredients can be added to foods labelled as organic. To protest this decision, go to [Organic Consumers Association](#). Among the non-organic ingredients are **two starches**.

Day 8: refined sugar

refined sugar

Get rid of refined sugar.

This includes such variations as brown sugar, dextrose, powdered sugar, raw sugar, table sugar, turbinado sugar, white sugar.

In June 2010 the U.S. government recommended that Americans cut back on sugar.

Go through your kitchen and remove all sugar.

When checking ingredient labels, some of the names for sugar include: brown rice syrup, cane syrup, corn sweetener, corn syrup, crystalized cane juice, dextrin, dextrose, evaporated cane juice, fructose, glucose, high fructose corn syrup, honey, malodextrin, maltose, maple syrup, molasses, or sucrose.

It is especially important for diabetics and pre-diabetics to limit sweets.

Maltose and glucose (two simple sugars) have a high glycemic index (greater than 100%).

An important rule of thumb is to avoid any foods tht have corn syrup or high fructose corn syrup.

If you really love yourself (and you need to really love yourself), then you really want to get the sugar out of your life.

Sure, the stuff tastes sweet.

There are other healthier choices for sweet, including simply chewing complex carbohydrates

(such as grains) long enough to release the natural sweetness.

Refined sugar is derived from plants.

Sugar is a preservative. Sugar is added to jams and jellies to help preserve the fruits. Sugar is added to animal lard in twinkies to give the multi-decade shelf-life (the cream filling of twinkies is just animal lard mixed with sugar).

Refined sugar is harmful to the liver and therefore should be reduced or eliminated from your diet.

Refined sugar depletes nutritional reserves, weakens the immune system, and generally weakens the health of the body.

Chinese herbalism:

Chinese: strongly yin

proteíns

proteins

Your deitary intakes should be about 10-35% proteins. The exact proportions needed vary from person to person.

Your body needs 40-65% carbohydrates, 10-35% proteins, and 15-35% fats.

Dr. Barry Sears, Ph.D., author of the popular Zone series of diet books, claims to have scientifically verified that the ideal percentages are 40-30-30 (40% of your diet should consist of carbohydrates, 30% should be proteins, and 30% should be fats).

Approximately 15-20 percent of the human body is made up of proteins. About half of the proteins are in the muscles and the cartilage. The other half is spread out as essential parts of cells and connective tissues, as well as enzymes, hormones, antibodies, hereditary material (DNA and RNA), and other bodily materials.

Protein molecules aare assembled from amino acids. Digestion breaks down food into amino acids and later the body combines these amino acids into proteins as needed.

Twenty amino acids are essential for human life. Eight of these (nine for infants) must be obtained from food (and are called the essential amino acids). The human body can synthesize the other twelve from a balanced diet.

A food that has all of the esential amino acids in the proper proportions and sufficient quantities for the human body is called a *complete protein*.. A food that has an unbalanced selection of essential amino acids or has only sufficient quantities to sustain life, but not sufficient for growth, is called a *partially incomplete protein*. A food that does not have enough of the essential amino acids to sustain life is called a *incomplete protein*.

Because almost all plants are partially incomplete protein sources or incomplete protein sources, vegetarians combine complimentary plants ot create a *composite protein*. A composite protein provides the same full nutritional value of essential amino acids as a complete protein, but comes from a combination of sources rather than from a single source.

It is much wiser to use vegetable sources of protein rather than animal sources, despite the greater knowledge needed to obtain full nutrition. Heavy meat-eaters have high quantities of

dangerous uric acid residue in their blood (in addition to the many other problems associated with meat eating).

protein-rich foods

Hemp seed meal (from the cannabis plant) is a complete protein. Soy is an almost complete protein.

Beans and rice together make a composite protein. Beans and almost any other vegetable make a composite protein. Broccoli and almost any other vegetable make a complete protein.

All fruits and vegetables contain some protein. Good sources of protein include: beans, lentils, nuts, peas, potatoes, pulses, seeds, sprouted seeds, and whole grains. Animal sources of protein (to be avoided) include: meat, milk, cheese, eggs, and fish. You should reduce or eliminate animal sources of proteins.

best protein-rich foods

- beef (not recommended)
- chicken (not recommended)
- chicken eggs (not recommended)
- clams (not recommended)
- dairy (not recommended)
- fish
- hemp seed meal
- meat (not recommended)
- poultry (not recommended)
- soybeans (dried)
- tofu
- whole eggs (not recommended)

excellent protein-rich foods

- beans (dried)
- broad beans (dried)
- garbanzo beans (dried)
- kidney beans
- legumes (dried)
- lentils (dried)
- lima beans (dried or cooked fresh)
- peas (dried or fresh)
- pulses

very good protein-rich foods

- black walnuts
- Brazil nuts
- cashews
- cottonseed
- nuts
- peanuts
- pistachio nuts
- seeds
- sesame seeds
- soybean sprouts
- sunflower seeds
- wheat germ

good protein-rich foods

- barley
- brown rice
- grains
- millet
- oats
- rice
- rye
- sprouted seeds
- whole grains
- whole wheat
- wild rice

protein-rich foods

- artichoke
- asparagus
- brewer's yeast (not to be confused with baker's yeast)
- broccoli
- Brussels sprouts
- cauliflower
- chard
- collards
- Indian corn
- kale
- mushrooms
- mustard greens
- okra
- potatoes

- spinach
- turnip greens

Day 9: refined salt

refined salt

Get rid of refined table salt.

Replace refined table salt with sea salt and other natural salts.

In June 2010 the U.S. government recommended that Americans cut back on salt.

iodized salt

Iodized salt is salt that contains small amounts of sodium iodide or potassium iodide. It is normal salt that has been sprayed with potassium iodate.

history:

History: The Chinese invented the percussive drill (the forerunner of the rotary drill used in modern times to drill for water and oil) about 2,000 years ago to drill for salt. The original rigs were made of bamboo. Salt is essential for digestion of nutrients for any society with a high rice content in the diet. In ancient China an ounce of salt was as valuable as an ounce of gold.

nutritional information:

You want to reduce salt in your diet.

Chinese herbalism:

Chinese: strongly yang

Chinese flavor: salty

fats

fats

Your deitary intakes should be about 15-35% fats. The exact proportions needed vary from person to person.

Your body needs 40-65% carbohydrates, 10-35% proteins, and 15-35% fats.

Dr. Barry Sears, Ph.D., author of the popular Zone series of diet books, claims to have scientifically verified that the ideal percentages are 40-30-30 (40% of your diet should consist of carbohydrates, 30% should be proteins, and 30% should be fats).

Some fats are actually essential for life (hence the name essential fatty acids). The major kinds of fats are: saturated fatty acids, polyunsaturated fatty acids, and monounsaturated fatty acids.

Keeping variety in your diet helps insure a good balance of essential fatty acids. Animal fats and margarine are bad for your health because of the high content of saturated fatty acids. Another reason to avoid eating meat.

Linoleic acid is an unsaturated fatty acid essential for healthy skin, blood circulation, bone, brain, and nerves. Linoleic acid is used for cell membrane metabolism. Linoleic fatty acid is used to make prostaglandins.

Essential fatty acids are destroyed by heating (including cooking). The presence of animal fats increases the destruction of essential fatty acids during cooking. Essential fatty acids are destroyed by hydrogenation.

Day 10: refined flour

refined flour

Get rid of refined flour.

Replace refined flour with whole grains, especially those that don't have gluten.

aerobics

aerobics

Aerobics are exercises that require the use of oxygen to breakdown glucose into energy.

Aerobic exercises cause elevated breath and heart rates to bring more oxygen into the lungs and distribute that oxygen throughout the body.

Examples of aerobic exercises include: bicycling, dancing, exercise classes, running, swimming, treadmills, and walking.

It is best to do at least a half an hour to an hour of aerobic exercise a day.

toxins

toxins

Eliminate toxins from your diet. many are discussed in separate listings in the Goddess Diet Plan.

Some toxins to eliminate include: antibiotics, artificial flavorings, artificial sweeteners, growth hormones, pesticides, preservatives (with a few natural exceptions), and synthetic hormone residues.

Exposure to toxic chemicals is a major risk factor for cancer.

Don't eat foods that your ancestors wouldn't recognize as food. Food manufacturers now make food-like substances, mostly from cheap processed ingredients such as corn syrup and soy pastes, laced with dozens of potentially toxic chemicals, and loaded with sugar, salt, and fat. Especially sugar, salt and fat, because those flavors trigger evolutionary desires and help cover up the nasty taste of the cheap ingredients and chemical stew.

Another important rule of thumb is to avoid any foods that have corn syrup or high fructose corn syrup.

resistance training

resistance training

Resistance training is a form of anaerobic exercise (without oxygen).

The most common kinds of resistance training are weight work (weight lifting, weight machines, etc.). The body itself can be used as the weight, such as push ups and pull ups. The resistance can be a fixed surface.

Try to do at least a half an hour a day of resistance training.

Day 12: cut trans fats

cut trans fats

Cut trans fats.

nutritional supplements

nutritional supplements

Supplements should only be used when you can't get the desired nutrients from real foods. Some people have severe health problems that prevent their ability to absorb certain nutrients or to digest the foods with those nutrients. More commonly, lifestyle issues interfere with eating properly. For example, students at most high schools have neither the facilities nor the time to eat proper lunches or snacks. Poverty, working conditions, long travel times, busy schedules, single parenting, etc. can all interfere with the ability to eat properly.

If you do need supplements, try to minimize the supplements to just the supplements you are really missing from your diet and try to take the minimum amount of supplements necessary to maintain health.

It is best to always check with a health care professional before starting any nutritional supplement.

If you experience any adverse reaction (including allergy) to any supplement, immediately stop using it and consult with a health care professional.

Day 13: oatmeal

oatmeal

Meal from the *Avena Sativa* plant.

Oat, a grain, is sacred to Aset (Isis) and Renenutet. Honor and thank Aset and Renenutet for oats and oatmeal.

Eat three to five servings of oatmeal a week. You may eat oatmeal every day.

Pure oats are gluten-free. Many processed oatmeals have gluten.

To avoid getting into a breakfast rut, also try quinoa, couscous, or brown rice for breakfast. Oatmeal can also be eaten at meals other than breakfast.

Epona, the Celtic Goddess of horses, was later adopted as a Roman Goddess. Outside of Gaul, Epona was often depicted in the Imperial pose, holding apples, carrots, and oats in her lap.

Ancient Egyptians left a little grain on their kitchen floor as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Eat oats on days associated with Mercury and Jupiter.

Oats are a sacred Druidic herb of the Sabbats Lammas and Mabon.

Oats are used in money and prosperity spells. Grain or straw oats may be placed on your altar. Oat cakes may be used as offerings to Goddess.

Oats are an acid-producing food (measured by the ash content resulting from laboratory titration).

Those with celiac disease may be able to eat small amounts of oats (as long as the oats are not contaminated with gluten from wheat or other sources during processing). Check with your

doctor or dietician.

Use slow cooked oatmeal. Avoid instant oatmeal. The complex carbohydrates in slow cooked oatmeal give it a low Glycemic Index while instant oatmeal is more processed and has a higher Glycemic Index. Slow cooked oatmeal may be reheated with little or no loss of nutrients.

Steel cut oatmeal is the healthiest. Use 1-1/2 cups of water to 1/4 cup of oatmeal. Steel-cut oatmeal takes between 20 and 40 minutes to cook, but you can cook a large batch and then reheat smaller amounts for convenience. Spices can be cooked into the oats rather than added later.

Oatmeal is high in soluble fiber. 1/3 cup of cooked oatmeal or 1/2 ounce of dry oatmeal is approximately 9 grams of carbohydrates. In 100 grams of oatmeal there are 13 grams of protein, 8 grams of fat, and 67 grams of carbohydrates. The carbohydrates in oatmeal are mostly complex, giving oatmeal a low Glycemic Index. Oatmeal has high levels of fat-burning antioxidants (especially good at getting rid of belly fat).

Oatmeal is one of the few foods on earth that has Gamma Linolenic Acid (GLA). GLA is an activated Essential Fatty Acid made from Linoleic Acid and a precursor of Dihomo Gamma Linolenic Acid (DGLA), a source of good eicosanoids.

Oatmeal helps cholesterol and helps fight cancer, diabetes, and obesity.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Oats are a good prebiotic.

“For as far as my knowledge goes the ultimate breakfast cereal is ... oatmeal. Really. It's unbelievable stuff. Every day one bowl of oatmeal and you're set for the day.”

“I started eating oatmeal about 2 years ago and still have them every morning. This grain is absolutely brilliant.”

“What I do is take one cup of oats and 2 cups of water and mix them in a pan. I cook it until it starts boiling a bit and then I quickly add some raisins while stirring a bit. Done!” [NOTE that slow cooking is healthier]

“Now here's the really cool part. When you read the **oatmeal ingredients label**, there's only one: Oatmeal! No added sugars, preservatives, coloratives and more-crap-atives. Just quality unprocessed and natural food — which is the way I like it.”

[Nico](#), March 19, 2008

Some recommended additions to your oatmeal to keep it from becoming monotonous and boring:

- Top with nutmeg and cinnamon.
- Add two (2) tablespoons of unsweetened pumpkin for alternative flavor with great nutrition.
- If you eat chicken eggs, consider adding four (4) egg whites while cooking your

oatmeal.

- Top with eight chopped or sliced almonds and real maple syrup. Adds calcium and makes the oatmeal crunchier. 1/4 cup almonds has 164 calories, 14 grams of fat (1 gram saturated, 9 grams monounsaturated, and 3.5 grams polyunsaturated), 1 gram sugar, 3 grams fiber, and 70 mg of calcium.
- Top with fresh blueberries when in season. Adds antioxidants and fiber. 1/2 cup of blueberries has 42 calories, 0 grams of fat, 7 grams of sugar, and 2 grams of fiber.
- Top with dried cranberries. Helps gum health and detoxes kidneys. Helps protect against bladder infections. 1/4 cup of dried cranberries has 92 calories, 0 grams of fat, 20 grams of sugar, and 2 grams of fiber.
- Top with ground flax seeds for omega-3s. 1 tablespoon has 37 calories, 3 grams fat (0 grams saturated fat, 0.5 grams monounsaturated, and 2 grams polyunsaturated), 0 grams sugar, and 2 grams fiber.
- Top with raisins. 1/4 cup of raisins has 123 calories, 0 grams fat, 24 grams sugar, and 1.5 grams fiber.
- Add hemp milk.

microwave

Oatmeal: Combine oats and water or milk in a microwave-safe bowl. Microwave on high for 1-2 minutes, stirring occasionally, until the oatmeal reaches your desired consistency. Add toppings like fresh fruits, nuts, or seeds for extra nutrition. [ChatGPT]

botanical information:

Botanical name: *Avena* spp. (approximately 30 species); especially *Avena sativa*

Common name: oat, oats

Avena sativa is common oats.

Family: Poaceae (grasses)

origin:

Origin: The wild ancestor of *Avena sativa* and *Avena byzantina* (a closely related crop) is *Avena sterilis*. *A. sterilis* is originally from the Fertile Crescent of the Near East.

history:

History: The wild ancestor of *Avena sativa*, modern oats, is *Avena sterilis*. *A. sterilis* is originally from the Fertile Crescent of the Near East. Oats (like rye) started as a weed that grew near wheat and barley. As barley and wheat spread to cooler, wetter locations, oats became domesticated crops.

History: Oats were found at at Gilgal I, a village site in the Jordan Valley north of ancient Jericho, from approximately 11,400 years B.P. (Before Present).

History: Oatmeal raisin cookies were U.S. President Jimmy Carter's favorite kind of cookie.

nutritional information:

Oats are a good source of protein.

Oats are a food that increases sexual energy and enhances fertility.

Oatmeal is high in soluble fiber. 1/3 cup of cooked oatmeal or 1/2 ounce of dry oatmeal is approximately 9 grams of carbohydrates. In 100 grams of oatmeal there are 13 grams of protein, 8 grams of fat, and 67 grams of carbohydrates. The carbohydrates in oatmeal are mostly complex, giving oatmeal a low Glycemic Index. Oatmeal has high levels of fat-burning antioxidants (especially good at getting rid of belly fat).

Oatmeal is one of the few foods on earth that has Gamma Linolenic Acid (GLA). GLA is an activated Essential Fatty Acid made from Linoleic Acid and a precursor of Dihomo Gamma Linolenic Acid (DGLA), a source of good eicosanoids.

One packet of low sodium instant oatmeal has 0.8 milligrams of zinc, which is 6% of the U.S. Recommended Daily Value, according to the U.S. National Institutes of Health.

Oatmeal helps cholesterol and helps fight cancer, diabetes, and obesity.

Chinese herbalism:

Chinese gender: slightly yang (slightly warm)

Chinese flavor: sweet

Ayurvedic herbalism:

Oats are an excellent food for those who have Vata constitution or those on an anti-Vata diet (high degree for reducing Vata).

external care:

External skin care: Oatmeal dries out the skin and is excellent for combatting acne.

astrological correspondences:

Astrological planet: Venus 

magickal correspondences and uses:

Western element: earth

Venus spells: Oats in Venus spells involving beauty, compassion, fidelity, friendship, happiness, interchanges, joy, love, luck, meditation, pleasure, reconciliation, and youth.



running

running

Running is a form of aerobic exercise. Running is usually divided into sprinting (high speed short distance running) and endurance running (longer distances at a slower overall speed).

Jogging is harsh on the knees. Running and walking are natural motions.

Day 14: apple cider vinegar

apple cider vinegar

Apple cider vinegar is sacred to Bast, Nwt and Het Heret (Hathor). Honor and thank Bast, Nwt, and Het Heret for apple cider vinegar.

Pomona, shown in the 1700 painting by Nicolas Fouché, is the Roman Goddess or nymph of orchards and the trees of the orchard.

Eat up to two (2) teaspoons of apple cider vinegar a day.

Generally your apple cider vinegar will be diluted with water or oil. Some possible ways to get your two (2) teaspoons of apple cider vinegar a day:

- Mix a teaspoon of apple cider vinegar in a tall glass of water.
- If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.
- If you eat meat, tenderize the meat overnight in a mixture of apple cider vinegar, herbs, and spices.
- Use the apple cider vinegar to make a salad dressing (preferably with hemp seed oil, flax seed oil, or extra virgin cold pressed olive oil.
- Use in other recipes.

Check the label. Only purchase apple cider vinegar that is certified organic, unfiltered, and unpasteurized. Avoid any apple cider vinegar that has additives or preservatives. Avoid anything that is apple cider “flavored” vinegar. The apple cider vinegar should have a rich brown color



and have visible sediment. Cobweb strands floating in the apple cider vinegar are very good. These strands are known as the “mother”.

Store apple cider vinegar in a dark cabinet or cupboard.

Apple cider vinegar helps cleanse the digestive system, which in turn helps the body absorb more nutrients from smaller portions of food.

salad dressing

salad dressing

Most store-bought salad dressing is high in calories and inflammatory industrial oils.

You can quickly make healthier homemade salad dressing by half and half olive oil (or hemp seed oil) and vinegar with spices you select.

Now that you have introduced both hemp seed oil and apple cider vinegar to your diet, you have probably noticed that most people don't like apple cider vinegar by itself, and some people don't like the flavor of hemp seed oil by itself.

The solution is oil and vinegar salad dressing, also known as *vinaigrette*. And the healthy green salads that you are starting to eat as you adjust to a healthy diet.

The basic oil and vinegar salad dressing combines some oil with some vinegar at a ratio of 3:1 (3 parts oil for every one part vinegar). This ratio may vary depending on the strength and tartness of the vinegar chosen. There are a lot of combinations of oils and vinegars.

Often a citric fruit juice is added, typically fresh squeezed organic lemon juice (another item on your list of recommended foods). Use small amounts of fruit juice. An alternative salad dressing calls for oil and lemon juice.

Add spices to taste. It is best to have a small number of spices. Experiment with the herbs and spices recommended for the Goddess Diet Plan.

All ingredients should be mixed at room temperature for best results.

oils

You can use almost any oil, but most have very weak flavors.

Organic cold pressed extra virgin olive oil (not the cheaper variations) is the most common premium choice because of its rich nutty flavor.

Organic cold pressed hemp seed oil is also nutty and a highly recommended oil.

Sesame oil is often used in Asian-flavored salad dressings.

Avocado oil and walnut oil have full rich flavors.

vinegars

Avoid distilled white vinegar. Otherwise any vinegar will do. Each has a different flavor.

Fruit vinegars, including apple cider vinegar, make for a sweeter salad dressing.

Balsamic vinegar is aged in wooden casks. The Italian government has strict standards for Balsamic vinegar. The U.S. does not.

White or red rice wine vinegar is good for Asian-flavored salad dressings.

juice

Often a citric fruit juice is added, typically fresh squeezed organic lemon juice (another item on your list of recommended foods). Use small amounts of fruit juice. An alternative salad dressing calls for oil and lemon juice.

spices

The basic spice is Kosher salt, often paired with ground white pepper. For the Goddess Diet Plan, either leave out salt or use sea salt (or the equivalent).

Many recipes call for the use of Dijon mustard.

An Italian vinaigrette would typically have extra virgin cold pressed olive oil, white wine vinegar, minced garlic, dried oregano, and chopped parsley.

A French vinaigrette would typically have extra virgin cold pressed olive oil, red wine vinegar, salt, freshly ground white pepper, and either Dijon mustard or garlic (or both).

Some popular ingredients (again, don't overload) include: minced garlic, minced onion, and minced shallot.

Some popular herbs and spices (again, don't overload, maybe sea salt, a pepper, and one spice or herb) include: fresh chopped basil, black pepper, celery seed, chopped fresh chives, marjoram, oregano, paprika, chopped fresh parsley, sea salt, tarragon, thyme, freshly ground white pepper.

honey

Another common ingredient is a little bit of honey. The sweetness of honey helps offset the tartness of the vinegar. Honey helps keep the oil and vinegar together much longer (long enough to eat a salad).

[Honey](#) is discussed further below.

mixing

Mix the herbs and spices with the vinegar. The classic method is to use a whisk and glass bowl. Never use aluminum around vinegar because it will give your salad dressing a metallic taste and the aluminum is toxic.

You can also mix by sealing a clean glass jar and shaking. Some people even use an electric blender.

Thoroughly mix the vinegar and herbs and spices, as well as Dijon mustard and/or honey, if you add those.

Mix in the oil with a slow steady stream while whisking continuously. All ingredients, especially the oil and vinegar, should both be room temperature.

Oil and vinegar don't mix. As soon as you stop mixing, the two will start coming apart. The oil will float on the vinegar. Honey will slow down this process. The cooler the oil, the more difficult to get it to mix with the vinegar.

Test the mixture by dipping a lettuce leaf into the dressing. This will give you a better idea of the flavor than testing the salad dressing raw. Don't double dip.

wait

Wait 30 minutes to three (3) hours before using the salad dressing. This will give the flavors (especially garlic) a chance to intermingle. Let the salad dressing sit at room temperature.

Thoroughly mix the salad dressing again immediately before serving.

Day 15: sleep

sleep

It is vital to get enough sleep.

Your body can not rebuild itself and make proper use of your nutrients without enough proper sleep. Lack of sufficient sleep can result in some otherwise useful nutrients being stored as fat.

Sufficient proper sleep can reduce food cravings.

Your mind and soul can not properly restore themselves without enough proper sleep.

Dreamland is an important part of your spiritual work. You can not become a shaman without mastering dreamland.

yoga

yoga

Yoga is great for maintaining back flexibility. Back flexibility is a basic measure of healthiness and aging.

It is very important to do all positions with proper form. Improper form can cause permanent damage. It is best to learn all positions used from a skilled and trained yogi or yogini. Once you have correctly mastered the proper form you can do yoga on your own to save money.

Some individuals have gone to extremes of positions in yoga and seriously injured themselves, sometimes paralyzing themselves. Do *not* overdo it (with yoga or any other exercise).

Day 16: cut back on meat

cut back on meat

Ancient Egyptian priests and priestesses didn't normally eat meat. The wab priests and web priestesses who kept the temple and temple items clean could not eat meat while working at the temple.

A lifetime commitment to be either vegan or lacto-vegetarian is a prerequisite for initiation into the Quan Yin Method.

Shakyamuni Buddha of India warned, "Flesh eating people cut off their inner seed of Great Mercy."

Han Shan Tzu, Chinese Zen Master, wrote in a poem, "Go quickly to the market to buy meat and fish and feed them to your wife and children. But why must their lives be taken to sustain yours? It's unreasonable. It will not bring you affinity with Heaven, but make you become dregs of Hell!"

If you do not currently eat meat, do not start. If you do currently eat meat (or any animals), cut back to the healthiest few choices.

In addition to cutting back on the kinds of meat eaten, also cut back on how often you eat meat. For now, cut back to only once or twice a week. Eventually you will want to cut back to only eating meat on the Full Moon and possibly a few other special occasions (such as Thanksgiving, Yule, or your own birthday). Special occasions replace the Full Moon for that month.

Meats are acid forming foods.

Meats that you should particularly avoid eating include: bacon, sausages, burgers, and all processed meats.

Modern diets have dramatically increased the amount of animal foods. Additionally, in the last few decades, the quality of animal foods has dramatically fallen.

In June 2010 the U.S. government recommended that Americans eat more fruits and vegetables.

Meats contain a lot of urokinase protein and urea, both of which burden your kidneys and can eventually destroy kidney function.

American surgery expert Dr. Miller practiced medicine in Formosa for 40 years. The hospital he established there served only vegetarian meals. Dr. Miller observed, “The mouse is one kind of animal which can support its life with both a vegetarian and non-vegetarian diet. If two mice are segregated, with one eating flesh and the other vegetarian food, we find that their growth and development are the same, but the vegetarian mouse lives longer and has greater resistance to disease. Furthermore, when the two mice got sick, the vegetarian mouse recovered quicker.”

red meat

Red meats: lamb, lean organic grass fed beef (including flank steak, round steak, rump roast, sirloin steak, tenderloin, and tri-tip roast), organic grass fed veal

Lamb, beef, and veal are sacred to Neith. Honor and thank Neith for lamb, beef, and veal.

If you don't currently eat red meat, do not start eating red meat. If you do eat red meats, switch to the recommended red meats and add the other recommended animal foods.

If you eat meat, tenderize the meat overnight in a mixture of apple cider vinegar, herbs, and spices.

beef

You can cut calories and cholesterol in a tasty manner by substituting portobello mushrooms for beef.

The American Diabetes Association recommends beef jerky and select or choice grade of beef trimmed of fat as a protein source. Recommended cuts of beef include: chuck, cubed, flank, porterhouse, rib, round, rump roast, sirloin, t-bone steak, and tenderloin.

lamb

The American Diabetes Association recommends lamb as a protein source. Recommended cuts of lamb include: chop, leg, or roast.

The American Diabetes Association recommends organ meats as a protein source. Recommended organ meats include: heart, kidney, and liver.

The American Diabetes Association recommends veal as a protein source. Recommended cuts of veal include: chop, loin, or roast.

You can substitute red peppers for pepperoni on pizzas.

white meat

White meats: ham, pork

Ham and pork are sacred to Neith. Honor and thank Neith for ham and pork.

Pork is sacred to Neith. Pork is associated with the Year of the Rat.

If you do not currently eat white mammal meats, do not start. The exception is that if you currently eat red meat, then add the recommended white mammal meat to your diet. If you do currently eat white mammal meats, switch to the recommended choices.

The American Diabetes Association recommends pork as a protein source. Recommended cuts of pork include: Canadian bacon, center loin chop, ham, and tenderloin.

offal

Offal is the entrails and internal organs of an animal used as food.

wild game

Wild game:

If you do not currently eat mammals, do not start eating wild game. If you do currently eat any mammal, then adding wild game will help improve the quality of the meat you eat. Wild animals have to be hardier to survive in the wilderness and therefore are a higher quality and healthier meat than farm raised animals (especially better than factory farm raised animals).

Wild game are sacred to Neith. Honor and thank Neith for wild game.

It is even better to eat animals you personally gathered (hunting, fishing, trapping, your own farming) or that were gathered by someone you personally know (family or friend).

The American Diabetes Association recommends game as a protein source. Recommended game include: buffalo, dove, duck, goose, ostrich, pheasant (no skin), rabbit, and venison (deer).

birds

Birds organic free-range chicken eggs, organic free-range skinless chicken breast, turkey

Birds are sacred to Nwt and her husband Shu. Honor and thank Nwt and Shu for birds.

If you do not currently eat birds, do not start eating birds. The exception is that if you currently eat any mammals (including red or white meat), then add the recommended birds to your diet. If you currently eat birds, switch to the recommended birds.

The American Diabetes Association recommends poultry without skin as a protein source. Recommended poultry includes: chicken, cornish hen, and turkey. Also recommended are: turkey ham, turkey kielbasa, and turkey pastrami. Recommended game birds include: dove, duck, goose, ostrich, and pheasant (no skin).

chicken

[Chicken](#) has its own chapter.

turkey

[Turkey](#) has its own chapter.

fish and seafood

Fish and seafood (all choices should be wild caught, never farm raised) Alaskan halibut, bass, chunk light tuna, clams, herring, oysters, salmon, sardines, trout

Fish and seafood is sacred to Aset (Isis). Honor and thank Aset for fish and seafood.

Followers of Aset (Isis) may eat fish, seafood, and dairy.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

The American Diabetes Association recommends fish and seafood as a protein source. Recommended fish include: catfish, cod, flounder, haddock, halibut herring, orange roughy, salmon, sardines, tilapia, trout, and tuna. Recommended seafood includes: clams, crab, imitation shellfish (Alaskan pollack), lobster, oysters, scallops, and shrimp.

shellfish

Shellfish are an aquatic shelled mollusk (e.g. an oyster or cockle) or crustacean (e.g. a crab or shrimp), especially one that is edible.

commentary

Vons (a grocery store chain in the U.S.) has a display of reusable grocery bags. The display is labelled “rebag • reduce • rethink”. One of the reusable grocery bags is decorated with the words: “top sirloin”, “rib eye”, “t bone”, “New York”, “porter house”, and “filet mignon”. These are the names of cuts of beef, the least sustainable and most ecologically destructive of all human food sources. Vons is actually promoting environmental destruction in its version of “green”. This is a large corporation so devoid of intelligence and soul that it doesn’t even understand the difference between environmental destruction and environmental protection!

Continental Airlines served an in-flight meal that included a cheeseburger, small bag of Fritos, and a bag of Bolthouse Farms “baby” carrots. The cheeseburger appeared to be greasy ground cow meat, gloppy slice of cheese, and refined flour bun. I asked if they had a vegetarian option. The stewardess arrogantly stated “Just don’t eat the cheeseburer.” I refused having the cheeseburger near me. Continental Airlines appears to be unaware that vegans, Buddhists, Hindus, and many others have valid religious and spiritual reasons not to cows. Continental Airlines appears to be unaware that Jews don’t eat meat and the mother’s milk in the same meal. Continental Airlines appears to be unaware that the meal they served is extremely dangerous to human health, certainly to any children.

herbal baths

herbal baths

Herbal baths are an important part of the Goddess plan. The herbal bath gives alone time for quiet meditation and centering as well as immersing the physical body in healing and rejuvenating herbs. It can be difficult for low or middle income women with children to come up with the time to have herbal baths. If the male partner is still around, try to arrange at least 30 minutes per week when he takes care of the children so that you can have your Goddess herbal bath. See also [herbs](#).

Day 17: miso soup

miso soup

Miso soup is sacred to Bast. Honor and thank Bast for miso soup.

Eat miso soup at least three to five times a week. You may eat miso soup every day, even multiple times a day.

Miso soup is particularly useful in helping offset the toxic effects of a diet high in meat, sugar, and alcohol.

Miso soup is commonly made with a fish stock, so vegans should be careful to choose miso soup made from a vegetable stock.

A study in the June 2003 issue of the *Journal of the National Cancer Institute* found that women who ate three (3) bowls of miso soup a day had a 40 percent lower risk of breast cancer and those who ate two bowls of miso soup a day had a 26 percent lower risk of breast cancer.

Miso is a good source of probiotics.

label reading

label reading

Learning to read labels can dramatically improve your health.

USDA food label

Sample label for
Macaroni & Cheese

① **Start Here** →

Nutrition Facts	
Serving Size	1 cup (228g)
Servings Per Container	2

② **Check Calories**

Amount Per Serving	
Calories	250
Calories from Fat	110

③ **Limit these Nutrients**

	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 3g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%

⑥

**Quick Guide
to % DV**

• 5% or less
is Low

• 20% or more
is High

④ **Get Enough of these Nutrients**

Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

5 Footnote

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

1. Serving Size Every American food label starts with the serving size. A mean-spirited, anti-consumer tactic employed by many large American corporations is to set the serving size at a fraction of the container. You need to multiply the number of servings per container times the listed information per single serving to determine the actual amounts. This extra step of arithmetic calculation is intended to confuse consumers.

2. Calories (and Calories from Fat) The label will list the number of calories per serving (remember to multiply by the number of fake corporate servings to obtain the number for a real serving).

The total number of calories (not the lower number per serving) is categorized as:

low = 40 calories

moderate - 100 calories

high = 400 calories or more

3. Limit these nutrients You want to see small numbers for Saturated Fat, Trans Fat (which should be zero), Cholesterol (plants have no cholesterol), and Sodium.

4. Get enough of these Most Americans do not get enough dietary fiber, vitamin A, vitamin C, calcium, or iron.

5. Footnote The footnote at the bottom of the label discusses how the nutritional Daily Value (DV) is computed for the average 2,000 calorie daily diet.

6. Percentage Daily Value (%DV) The percentages of Daily Value are how much of the total recommended Daily Value for an average adult male are provided by the food labelled.

Also The standard food label also gives the Total Carbohydrates, Sugars, and Protein. The Sugars entry lists the combination of both naturally occurring sugars in the food as well as the added sugars. The Protein entry is optional unless packaging or marketing makes claims about protein or the food is intended for infants and children under the age of four years old.

Ingredients The Ingredients listing will tell you “contains no added sugars” or “contains added sugars”. Ingredients are listed in order from the most weight to the least weight. Unfortunately, there are some ingredients that do not have to be listed for specific foods. The U.S. government expects the consumer to have these special lists memorized.

One important rule of thumb on ingredient lists is to avoid any foods that have chemical-sounding names that you don't recognize.

When checking ingredient labels, some of the names for sugar include: brown rice syrup, cane syrup, corn sweetener, corn syrup, crystalized cane juice, dextrin, dextrose, evaporated cane juice, fructose, glucose, high fructose corn syrup, honey, malodextrin, maltose, maple syrup, molasses, or sucrose. Avoid foods where any of these ingredients are near the top of the list.

Another important rule of thumb is to avoid any foods tht have corn syrup or high fructose corn syrup.

USDA organic

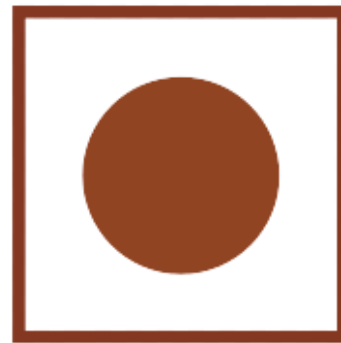
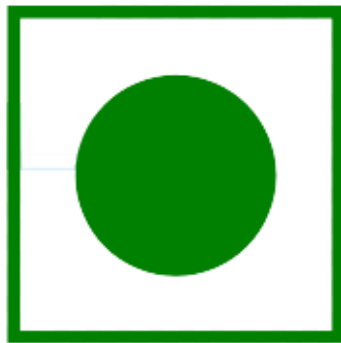
The organic label certifies that the food is completely organic (with a number of obscure special exceptions). This also means that the food has no GMO (genetically modified organisms).

Note that there are many small, local farmers that grow food to the same or higher standards, but who can't afford the cost of the government requirements for certification.

Also note that foods grown in hot houses typically also meet the same standards, but don't have the certification.



Indian vegetarian



The government of India requires that vegetarian food be labelled with the green dot (above left) and non-vegetarian food be labelled with the red dot (above right).

Day 18: herbs and spices

herbs and spices

Herbs and spices are essential to the Goddess Diet Plan. They serve numerous important purposes.

Use herbs and spices for every meal. Unlimited quantities of herbs and spices. Emphasize aloe vera, basil, black pepper, cayenne, chives, cilantro, cinnamon, cloves, coriander, garlic, ginger, horseradish, licorice, mint, mustard, oregano, parsely, peppers, rosemary, thyme, tumeric.

Herbs and spices add flavor to food, making it easier to give up such things as meats and switch to a plant-based diet.

The use of herbs and spices to add flavor make it possible to dramatically cut back on ordinary table salt (which should be reduced and then entirely eliminated from your regular diet).

The use of selected herbs and spices can help control sugar cravings, allow you to reduce the excess amounts of sugar in a typical urban diet.

Herbs and spices have nutritional values of their own, some containing vital nutrients that are rare and otherwise difficult to acquire. You may note that some foods typically only used as herbs and spices are listed here as salad greens or other foodstuffs.

Herbs and spices have Ayurvedic, planetary, and other spiritual properties that help you maintain a balanced soul.

Herbs and spices have actual magickal properties that can be used for your Witchcraft spells and rituals.

Avoid overwhelming food with too many seasonings at once. Avoid two herbs with strong flavors in the same dish. Try to compliment a strong herb with milder flavored seasoning.

Add dried herbs early during cooking. Add fresh herbs near the end of cooking. Add herbs and spices to cold dishes several hours before serving so that there is time for the flavors to blend.

Fresh leaves should be chopped very finely. Dried herbs should be crushed in a mortar and pestle.

If doubling a recipe, only increase herbs and spices by about 50 percent.

Dried herbs typically have a stronger flavor than the same herb fresh.

Dried herbs and spices should be stored in a cool, dry, dark place in a tightly covered container. Put the date on dry herbs and spices when you obtain (or purchase) them. If you can no longer smell an herb when you rub it between your fingers, then discard it.

sprinting

sprinting

Save this suggestion for a later date if you are not currently in good physical shape. Some individuals may not ever be able to add sprinting to their exercise routine.

Sprinting is a more advanced exercise that can be used by those who are in good physical shape.

Wind sprints are running a short distance as fast as is humanly possible (combining good form with maximum effort). Wind sprints can be made even more challenging by sprinting up stairs.

Day 19: fizzy drinks

fizzy drinks

Remove fizzy drinks from your diet (except for rare special occasions).

This includes removing sodas, energy drinks, diet drinks, and any beverage that is carbonated.

pH balance

pH balance

You want at least 80% of your food intake to be alkaline-producing foods.

pH is a measure of how acid or alkaline a solution is. pH 7 is considered neutral, pH 0 is considered the most acidic, while pH 14 is considered the most alkaline.

The normal pH of human blood is approximately 7.4 (in a normal range of 7.35 to 7.45), a slightly alkaline solution.

If the blood drops below pH 7.35 then it is too acidic, a condition known as acidosis. The body starts to use up minerals (especially calcium, sodium, potassium, and magnesium) to alter the acids and remove them from the blood stream. The minerals are taken from the bones and vital organs, which can cause permanent damage. In the extreme, acidosis can cause death.

If the blood rises above pH 7.45 then it is too alkaline, a condition known as alkalosis (or alkalinosis). In extreme alkalosis can cause permanent damage or death.

The typical American diet is highly acid-producing and most Americans suffer from at least mild acidosis.

Some of the common symptoms of acidosis include: acne, bad hair, bladder infections, bone spurs, brittle nails, chronic fatigue, colds, diabetes (type II), dull skin, eczema, excess weight, fibromyalgia, flus, forgetfulness, frequent infections, gout, hip fractures, joint pain, kidney stones, liver spots, low energy, mood swings, muscle aches, obesity, osteoarthritis, osteoporosis, premature lines and wrinkles, poor concentration, psoriasis, rheumatoid arthritis, and yeast infections

Common American reasons for acidosis (acid overload) include: a high protein diet, lots of refined carbohydrates (especially bread and pasta), too few vegetables and fruits, and high amounts of alcohol.

Important items to reduce from the diet to reduce acid overload include: milk, caffeine, nicotine, and alcohol.

The easy way to test if your body is in correct pH balance is to measure the pH of your urine.

Urine should be exactly 6.4 pH, for male or female of any age or race.

Day 20: broccoli

broccoli

Broccoli, a cruciferous vegetable, is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for broccoli.

Eat broccoli at least three to five times a week. You may eat broccoli every day.

Broccoli is a [cruciferous vegetable](#).

The American Diabetes Association recommends broccoli as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Broccoli is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Raw broccoli has about twice as much Vitamin C as an equivalent amount of orange juice.

Raw broccoli has about three times as much calcium as an equivalent amount of milk.

Broccoli has indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Broccoli has vitamin C, an essential nutrient in fighting cancer.

Raw broccoli has an interesting taste of its own.

Learn to like raw broccoli and make your body happier.

botanical information:

Botanical name: *Brassica oleracea italica* (Italica Cultivar Group of species *Brassica oleracea*)

Common name: broccoli, brocks, calabrese, Italian asparagus, Italian broccoli

French name: brocoli

Family: Brassicaceae (cabbage); formerly Cruciferae family

origin:

Origin: Mediterranean and Asia Minor; especially Italy.

history:

History: Broccoli was considered a valuable food in the Roman Empire (especially in the Italian peninsula)

nutritional information:

The American Diabetes Association recommends broccoli as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Broccoli is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Broccoli is a good source of proteins, carbohydrates, and lipids and is low in calories.

Broccoli is a source of protein.

Broccoli is a source of calcium, copper, and iron.

Raw broccoli has about twice as much Vitamin C as an equivalent amount of orange juice.

Raw broccoli has about three times as much calcium as an equivalent amount of milk.

Broccoli helps keep the liver clean and healthy.

Broccoli has indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Broccoli has vitamin C, an essential nutrient in fighting cancer.

Broccoli is a source of sulforaphane, an antioxidant that detoxifies carcinogens. Doctors at John Hopkins University medical School identified broccoli as an exceptionally rich source of sulforaphane in 1992 and discovered in 1997 that broccoli sprouts have 20 times as much sulforaphane as the mature plant.

Eating cruciferous vegetables reduces the risk of bladder cancer by 29 to 41 percent and reduces the chance of breast cancer, lung cancer, and colorectal cancer.

nutritional value per 1 oz (28.35 gm.):

- **Proteins:** 800 mg
- **Beta carotene:** 177 IU
- **Vitamin E:** 220 mcg
- **Vitamin C:** 25.3 mg
- **Phosphorus:** 19 mg
- **Magnesium:** 6 mg
- **Calcium:** 13 mg
- **Iron:** 0.21 mg
- **Potassium:** 90 mg

Chinese herbalism:

Chinese gender: yin (cool)

Chinese flavor: slightly pungent

selection:

Broccoli has the number eleven (11) lowest pesticide load of 45 common fruits and vegetables studied in 2006 by the [Environmental Working Group](#) and is therefore a food that can be purchased conventionally-grown when organic isn't available. The EWA explains, "While washing and rinsing fresh produce may reduce levels of some pesticides, it does not eliminate them. Peeling also reduces exposures, but valuable nutrients often go down the drain with the peel. The best option is to eat a varied diet, wash all produce, and choose organic when possible to reduce exposure to potentially harmful chemicals."

According to USDA and FDA tests on commercially grown foods collected between 2000 and 2005, broccoli has a 28.1% (percentage) of samples tested with detectable pesticides, a 3.2% (percentage) of samples with two or more pesticides, an 0.3 average number of pesticides found in a sample, an average of 0.004 parts per million of all pesticides found, and 19 different pesticides found in use growing broccoli. These toxic pesticides don't apply to organic foods.

storage:

Storage: Eat broccoli within two days of purchase.

balance of yín and yang

balance of yin and yang

The Chinese divide foods into three major groups: yin, yang, and neutral. A healthy person should have a balance of Yang and Yin foods, as well as neutral foods. Yang foods tend to heat the body up. Yin food tend to cool the body down. Neutral foods are in between.



You want to build up meals that give you a good balanced diet. Start with one or more neutral foods and balance yin and yang foods.

In the morning and evening, when the temperature is more yin (or cool), you want to eat more yang (warming foods). In the middle of the day, when the temperature is more yang (or hot), you want to eat more yin (cooling foods).

So, your morning meal, or breakfast, should be a hearty cooked meal (yang). Your mid-day meal, or lunch, should consist of salads and fruits. And your evening meal, or dinner, should be another cooked meal. Your dinner should be a much lighter meal than your breakfast because the body's ability to metabolize food decreases after sundown.

Day 21:

cranberry juice

cranberry juice

Cranberry juice is sacred to Bast. Honor and thank Bast for cranberry juice.

At the Solstices and Equinoxes, as well as at Full Moon Esbats, a ceremony to the seasons involves drinking white grape juice (representing winter), white grape juice with a small amount of red cranberry juice (representing spring), red cranberry juice with a small amount of white grape juice (representing summer), and red cranberry juice (representing autumn). This should include fruits and nuts representing the seasons.

The mixture of pure, 100% unsweetened cranberry juice and fresh-squeezed orange juice is appropriate for the day of the Sonne (Sunday).

Initially you are going to include pure, 100%, unsweetened cranberry juice on a daily basis. As you progress into this diet, you will drop back on the frequency of drinking cranberry juice until it is a rare part of your diet, except when needed medicinally.

Reduce or eliminate cranberry juice from your diet, with two important exceptions.

If you have bladder or urinary tract problems, cranberry juice can be very helpful.

When switching to a new diet, including this one, cranberry juice can help the digestive system adjust. If you have digestive problems with your switch to this diet, especially near the beginning, consider drinking pure, 100%, unsweetened cranberry juice. In general it is best to avoid cranberry juice with added sugar, including mixtures with high sugar fruit juices.

The obvious question is why would an item (cranberry juice) that should be reduced from your diet be listed near the top of the “to add” items. The answer is that cranberry juice makes it

easier to adjust to a new diet and cranberry juice helps a person who is obese or overweight to lose some weight. These two important benefits make cranberry juice an important part of the beginning of the Goddess Diet Plan, even though you will eventually want to cut back or even eliminate cranberry juice from your diet.

yang foods

yang foods

Yang foods are foods that **warm** the body. Yang foods are warming, stimulating, and energetic. Yang foods are recommended for Yang deficient and Yin excess imbalance.

Avoid some strongly yang foods, such as meat, cheese, and salt.

In the morning and evening, when the temperature is more yin (or cool), you want to eat more yang (warming foods). So, your morning meal, or breakfast, should be a hearty cooked meal (yang). And your evening meal, or dinner, should be another cooked meal. Your dinner should be a much lighter meal than your breakfast because the body's ability to metabolize food decreases after sundown.

slightly yang foods (slightly warm)

- almond
- bell peppers
- chicken
- hawthorne berry
- oats
- parsley
- raspberry
- sweet rice
- wheat germ

yang foods (warm)

- beef (not recommended)
- black beans
- cherry
- Chinese chive
- kale
- lamb (not recommended)
- leek

lycium fruit

- mustard greens
- onion
- papaya
- pineapple
- shrimp

strongly yang foods (hot)

- cheese (not recommended)
- Chinese chive
- egg yolks (not recommended)
- garlic
- meat
(not recommended)
- offal
(not recommended)
- salt
(not recommended)
- scallion



Day 22:

breakfast

breakfast

Eat breakfast every day.

In the morning and evening, when the temperature is more yin (or cool), you want to eat more yang (warming foods). So, your morning meal, or breakfast, should be a hearty cooked meal (yang). Your mid-day meal, or lunch, should consist of salads and fruits. And your evening meal, or dinner, should be another cooked meal. Your dinner should be a much lighter meal than your breakfast because the body's ability to metabolize food decreases after sundown.

Most U.S. breakfast cereals, including Frosted Flakes, Honey Bunches of Oats, and Rice Krispies, are banned in the European Union and Japan because they include Butylated hydroxytoluene (BHT), an artificial flavor enhancer that is carcinogenic.

breakfast around the world

eastern Africa: mandazi

Algeria: sfenj

Argentina: medialunas

Australia: vegemite

Bangladesh: chapattis; mughlai paratha

Bavaria: white veal sausages with sweet mustard, pretzels, and beer (Weisswurstfrühst ck)

Brazil: caf  da manh , p o de queijo (cheese-flavored rolls), ham, cheese, pao frances (small loaves of bread eaten with butter), fruits like papayas or any other seasonal fruit; bread, coffee and fruit; p o de queijo

Bulgaria: banitsa

Cambodia: kuy teav (rice noodle soup with pork or beef broth, bean-sprout, vegetables, dry onion; shallots, garlic, and herbs), pork or fish balls, chili paste, soya sauce and half a lime; num banh chok

Canada: eggs, bacon, and toast; maple syrup eggs

Catalan: pan a la Catalana or pan con tomate (bread rubbed with garlic and tomato drizzled with olive oil) topped with cheese, ham, or sausages if required, and is served with caf  con leche

China: youtiao; noodles, rice, sticky chicken, fried veggies, dim sums, steamed buns, congee, and fried dough sticks (called you tiao) dipped in warm soy milk; shengjian

Columbia: arepas (dense, slightly sweet corn cakes) served with butter, or eggs, meat, and jam; changua (an egg, cheese, and milk soup); calentado

Costa Rica: gallo pinto (leftover rice stir-fried with black beans, red pepper, and onions, topped with salsa and sour cream), served with eggs, avocado, cheese, sausages, or tortillas

Crete: olives, cheese, tomatoes, cucumber, yoghurt, bread, paximadia, honey, hard-boiled eggs, orange juice and coffee or tea

Cuba: tostada with caf  con leche

Czechia: krupicov  ka e

Denmark: open face sandwich of rye bread, cheese, cold cuts, p t , honey, jam, vegetables, hard-boiled eggs, and/or chocolate

Egypt: ful medames (fava beans and chickpeas stewed and spiced with cumin, parsley, onion, lemon, and chilli), hard-boiled eggs, diced vegies, baladi flatbread

England: full breakfast (back bacon, pork sausage links, eggs (fried, poached, or scrambled), fried or grilled tomatoes, fried mushrooms, fried bread and toast, black pudding, baked beans, bubble and squeak (in modern times this is often replaced with hash browns)); modern vegan variation uses meat alternatives for sausages and bacon and scrambled tofu for eggs

Estonia: kohuke

Ethiopia: firfir

Finland: puuro

France: bread, pastries, and coffee

Germany: (called frühstück) bread, cheese, cold cuts, and coffee; fresh bread, sausages, cold sliced meats, local cheeses, butter, and jam

Ghana: hausa koko

Greece: spanakopita (savory pie); kagianas (scrambled eggs with tomatoes and feta); spanakopita and kagianas typically served with yoghurt with honey and walnuts, pastries, bread, and cold cuts

Hawai'i: spam, eggs, and rice

Honduras: baleadas

Hungary: pogácsa (a focaccia-like bread that can be stuffed with potatoes, ground beef, or cheese) and hot tea or coffee

north India: chana poori

southern India: idlis (fermented rice and lentils steamed to form a soft cake); dosas (similar to crepes or pancakes but made with fermented batter usually with rice or black gram); idlis or dosas typically served with sambar (a vegetable stew) and chutney

western India: kande pohe

Indonesia: bubur ayam

Iran: haleem (thick wheatmeal porridge with meat); adasi (lentil soup) ; omelettes; kaleh pâcheh(a stew of lamb's head and hoof); haleem (thick wheatmeal porridge with meat); mealks served with chai shirin, tea with granulated sugar;

Ireland: full breakfast (back bacon, pork sausage links, eggs (fried, poached, or scrambled), fried or grilled tomatoes, fried mushrooms, brown soda bread, fried potato farls, white pudding, baked beans, and boxty

Israel: shakshuka (eggs poached in a tomato sauce) ; breads with a variety of cheeses, omelette, tuna, olives, butter, jams, salad and spreads

italy: cappuccino and cornetto

Jamaica: ackee (a fruit that looks like scrambled eggs) and saltfish (salted cod), onions, tomatoes, rice, and fried plantains; cornmeal porridge

Japan: miso soup, rice, and grilled fish; teishoku; wafuu breakfast: several small dishes

commonly including rice, miso soup, sticky soybeans, nori seaweed, pickled vegetables, and fish or omelettes (tamagoyaki is sweet and savory Japanese Rolled Omelette flavored with dashi)

Kazakhstan: baursak

Kenya: manazi

Korea: rice and banchan; bowl of rice, vegetable soup, some fish or beef, and a plate of kimchi, with side dishes

Lebanon: manakeesh or manakish (flatbreads often called “Lebanese pizza”); manakish covered in zata’ar, creamy labne, cheese, tomatoes, olives, eggs, fowl mudammas, shakshuka, tea, and savoury pastries called mouajanet)

Libya: aseeda

Lichtenstein: ribel

Lithuania: varškėčiai

Malaysia: nasi lemak

Mexico: chilaquiles (fried tortillas topped with green or red salsa, refried beans, and shredded chicken, or leftovers); chilaquiles rojos; Huevos rancheros (traditional Mexican eggs); churro (a deep fried dough topped with sugar and cinnamon) and coffee or hot chocolate;

Mongolia: tarag

Morocco: msemen (a flatbread covered with butter and honey); khobz bread with a drizzle of olive oil and hot tea; bread and semolina pancakes with some chutney, jam, cheese or butter, honey, eggs, olives, and dates, as well as Turkish coffee and mint tea

Myanmar: mohinga (rice noodle and fish soup is flavored with lemongrass, fish paste, ginger, onions and chickpea); Kaung Nyin Paung (steamed glutinous rice seasoned with sesame salt)

Nepal: malpuwa

Netherlands: hagelslag on bread; buttered spiced bread (ontbijtkoeken) topped with various things like ham, cheese, jam, eggs or hagelsag (sweet, flavoured sprinkles); cereals and fry-ups (called een uitsmijter); ham and cheese sandwich; sweet spice cake

Nigeria: kosai; moin-moin and akamu (a sweet and creamy cornmeal custard) ; Ogi and Akara (cornmeal and bean cakes) often accompanied with yam, fried eggs, and fried plantain

Pakistan: halwa puri (poori with a sweet mixture); halwa puri nashta; stuffed parathas (flatbread stuffed with various vegetables, usually potatoes and cooked) eaten with butter, yoghurt, and pickle; nihari (a spicy meat curry) served with naan

Peru: tacacho con cencina; tamales

Philippines: fruit, pan de sal (bread rolls), and hearty rice dishes like tapsilog (rice with dried meat and eggs) or longganisa (little sausages which can be fried with garlic, eggs, meats, and beans) or hotsilog (hot dog with rice), and spamsilog (spam with rice); tortang tahong

Poland: kanapki; jajecznica, scrambled eggs topped with kielbasa (sausages) and potato pancakes; an open sandwich, topped with a range of ingredients like cold cuts, cheese, sausages, or eggs

Russia: kasha; boiled egg, scrambled, fried or an omelet; small girdle cakes (in many varieties like the cheese-stuffed syrniki, the crepe-like blini (made with kefir), and the fluffy oladi) served with soured cream, honey, jam or fresh berries;

Scotland: Lorne sausage and tattie scones; full breakfast (Ayrshire middle bacon, Lorne sausage, eggs (fried, poached, or scrambled), fried or grilled tomatoes, fried mushrooms, tattie scones, Stornoway black pudding, baked beans, haggis, fruit pudding, oatcakes

Senegal: café touba

Singapore: kaya toast (white bread spread with butter and kaya jam, a Southeast Asian spread made of coconut, egg, and sugar)

Somolia: canjeero

South Africa: putu pap; mieliepap

South Sudan: medeeda

Spain: churros with chocolate; torilla de patatas

Sweden: SmörgåsarNordic open sandwiches covered with cold cuts, fish, cheese, or vegetables (knäckebröd); pannkakor (thin crepe-like cakes are usually topped with sweet fruity fillings made with cloudberry or lingonberry)

Switzerland: muesli

Taiwan: jianbing; dan bing

Tajikistan: kolbasa and kulcha

Tunisia: lablani

Turkey: menemen; bread, cheeses, olives, cucumbers, tomatoes, spicy Turkish sausages, honey, jams, omelet, and fruit, accompanied by baked dishes like börek (filled phyllo pastry) and Turkish tea or coffee

Uganda: katogo

United Arab Emirates (UAE): balaleet

United Kingdom: full English breakfast (eggs, bacon, baked beans, mushrooms, grilled tomato, black pudding, toast. and cup of tea)

United States (USA): eggs, crispy bacon, hash browns, pancakes topped with maple syrup, and toast; breakfast cereal with milk and sugar; bacon, fried eggs, pancakes or waffles, hash browns, oatmeal; biscuits and sausage gravy, eggs (scrambled or fried), hash browns, grits; avocado toast; breakfast burrito; fruit smoothie; breakfast sandwich; chicken and waffles; bagel with cream cheese; bagels and lox

Uzbekistan: samsa

Venezuela: cachapas; arepas

Vietnam: pho

Wales: full breakfast (back bacon, Welsh sausage, eggs (fried, poached, or scrambled), fried or grilled tomatoes, fried mushrooms, fried bread and toast, black pudding, baked beans, cockles, laverbread

Yemen: kubaneh

yín foods

yin foods

Yin foods are foods that **cool** the body. Yin foods are cooling, calming, and nourishing. Yin foods are recommended for Yin deficient and Yang excess imbalance.

Avoid some strongly yin foods, such as sugars, alcohol, and coffee.

In the middle of the day, when the temperature is more yaang (or hot), you want to eat more yin (cooling foods). Your mid-day meal, or lunch, should consist of salads and fruits.

yin foods (cool)

- alfalfa sprouts
- apple
- apricot
- Asian pear
- asparagus
- bamboo
- bamboo shoots
- barley, pearl
- bok choy
- broccoli
- burdock root
- carrot
- cauliflower
- celery
- chicken eggs (not recommended)
- Chinese cabbage
- clam
- crab
- cucumber
- Daikon radish
- dandelion
- dandelion greens

eggs, chicken (not recommended)

- eggplant
- endive
- grapefruit
- lemon
- lotus root
- millet
- orange
- peach
- pear
- pearl barley
- persimmon
- pork (not recommended)
- potato
- pumpkin
- Romaine lettuce
- soy bean sprouts
- spinach
- squash
- strawberry
- tangerine
- tomato
- turnip
- watercress
- wheat
- zucchini

strongly yin foods (cold)

- alcohol (not recommended)
- ale (not recommended)
- banana
- beer (not recommended)
- cantaloupe
- Chinese cucumber
- coffee (not recommended)
- dulse
- kelp
- mulberry
- refined sugars (not recommended)
- seaweed
- tea
- water chestnut

watermelon



Day 23: fruits

fruits

Fruits are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for fruits.

Eat at least one serving of whole fruit a day. Eat up to four servings of whole fruit a day. Diabetics and pre-diabetics should eat one serving of fruit a day. Others should eat an average of two servings a day.

Major groups discussed separately are citrus fruits, berries, high fiber fruits, melons, fleshy red fruits, and dried fruits. Mix up the categories from day to day and emphasize fruits that are currently in season, preferably from a local source.

The dried fruit group should be used primarily for filling in gaps in your diet. When the fresh whole fruit is out of season the dried version can be used as a substitute. When you need a portable snack the dried version can be used as a substitute. Whenever possible, eat fresh whole fruits.

In general, the more colorful a plant is, the more antioxidants it has produced (as well as other phytonutrients that can help your body heal itself). These antioxidants help prevent cancer and help your body fight off any disease that is forming or has formed in your body.

In most cases, the deeper the color, the healthier. A bright red strawberry is healthier than a pale red strawberry. A rich blue blueberry is healthier than a pale blueberry.

The American Diabetes Association recommends fresh fruit, canned fruit without added sugars, or frozen fruit without added sugars.

Fruit cocktail is recommended by the American Diabetes Association because it has a low glycemic index (low G.I.).

Spices that go well with fruit include allspice, anise, cardamom, cinnamon, cloves, coriander, ginger, and mint.

neutral foods

neutral foods

- adzuki beans
- beets
- black plum
- black sesame seed
- brown rice
- buckwheat
- cabbage
- chard
- Chinese date
- Chinese yam
- corn
- cod
- dairy {not including cheese} (not recommended)
- fig
- fish
- gelatin (not recommended)
- gojii berry
- grape
- jujube
- lettuce
- lycii berry
- loquat
- maize
- mango
- milk (not recommended)
- olive
- oyster
- peas
- plum
- rice
- salmon
- string beans

- sweet potato
- taro root
- turkey (not recommended)
- yam
- yogurt (not recommended)

Day 24:

cinnamon

cinnamon

Day 24: cinnamon

Cinnamon is sacred to Bast and Seth. Honor and thank Bast and Seth for cinnamon.

Eat cinnamon at least once per week, taking in account the season and local availability. You may eat cinnamon every day.

Eat cinnamon on days associated with Mercury.

Cinnamon is an aromatic spice made from the peeled, dried, and rolled bark of a Southeast Asian tree.

The ancient Egyptians used cinnamon for medical purposes.

Cinnamon helps control sugar cravings by bringing out the flavor of natural sugars already in foods.

Cinnamon helps prevent skin blemishes.

Cinnamon goes well with bread and fruit.

Ayurvedic doshas

Ayurveda doshas

Ayurveda provides a sophisticated system for combining foods based on individual type. The primary tool is the three doshas.

Day 25: dairy foods

dairy foods

Dairy foods are sacred to Aset (Isis). Honor and thank Aset for dairy foods.

Cut back or eliminate dairy products from your diet. Additional information on specific dairy products listed separately.

Buttermilk is much healthier than whole cow's milk. Buttermilk can be substituted for cow's milk in recipes.

Switch from cow's milk to goat's milk or sheep's milk.

Explore dairy cow's milk substitutes such as hemp seed milk, soy milk, rice milk, and almond milk.

Switch from cheese made from cow's milk to cheese made from goat's milk or sheep's milk.

Aged cheeses are a good source of probiotics.

cow milk

cow milk

Dairy foods are sacred to Aset (Isis). Honor and thank Aset for dairy foods.

Cut back or eliminate dairy products from your diet. Additional information on specific dairy products listed separately.

Switch from cow's milk to goat's milk or sheep's milk.

Explore dairy cow's milk substitutes such as hemp seed milk, soy milk, rice milk, and almond milk.

US milk is banned in Australia, Canada, the European Union, Japan, and New Zealand because US dairy cows are fed the synthetic Monsanto-invented recombinant bovine growth hormone(rBGH) to increase milk production. This increaes the chances of breast and other cancers.

cheese

cheese

Dairy foods are sacred to Aset (Isis). Honor and thank Aset for dairy foods.

Cut back or eliminate dairy products from your diet. Additional information on specific dairy products listed separately.

Switch from cheese made from cow's milk to cheese made from goat's milk or sheep's milk.

Aged cheeses are a good source of probiotics.

Cheese is an animal product.

Wisconsin is the largest producer of cheese in the U.S., producing about 25% of America's cheese.



nutritional information:

Cheese is a source of [calcium](#), [chromium](#), [iodine](#), and [protein](#).

The Japanese (and many other Asian cultures) avoid using cheese in cooking because they find the smell highly offensive. The Japanese view cheese as rotten milk (which it is).

One ounce of Swiss cheese has 1.1 milligrams of [zinc](#), which is 8% of the U.S. Recommended Daily Value, according to [the U.S. National Institutes of Health](#).

One ounce of cheddar cheese has 0.9 milligrams of zinc, which is 6% of the U.S. Recommended Daily Value, according to [the U.S. National Institutes of Health](#).

One ounce of low moisture part skim mozzarella cheese has 0.9 milligrams of zinc, which is 6% of the U.S. Recommended Daily Value, according to [the U.S. National Institutes of Health](#).

Cholesterol: Cheddar cheese has 70 mg cholesterol per 100 g.

“It may indeed be doubted whether butchers’ meat is anywhere a necessary of life. Grain and other vegetables, with the help of milk, **cheese**, and butter, or oil, where butter is not to be had,

afford the most plentiful, the most wholesome, the most nourishing, and the most invigorating diet. Decency nowhere requires that any man should eat butchers' meat.”, Adam Smith (British economist).

Chinese herbalism:

Chinese: strongly [yang](#)

cautions and contraindications:

Cautions and contraindications: You want to reduce or eliminate cheese from your diet.

Animal cautions and contraindications: Cheese should never be fed to cats or dogs.

See also: [dairy foods](#).

amino acids

amino acids

Amino acids are the building blocks for proteins.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

AMINO ACIDS are the “building Blocks” of the body. Besides building cells and repairing tissue, they form antibodies to combat invading bacteria & viruses; they are part of the enzyme & hormonal system; they build nucleoproteins (RNA & DNA); they carry oxygen throughout the body and participate in muscle activity. When protein is broken down by digestion the result is 22 known amino acids. Eight are essential (cannot be manufactured by the body) the rest are non-essential (can be manufactured by the body with proper nutrition).

—courtesy of [Austin Nutritional Research](#)

essential amino acids:

isoleucine
leucine
lysine
methionine

phenylalanine
threonine
tryptophan
valine

non-essential amino acids:

alanine
arginine
asparagine
aspartic acid
cysteine
glutamic acid
glutamine
glycine
histidine
proline
serine
taurine
tyrosine

other amino acids:

theanine

Day 26: green leafy vegetables

green leafy vegetables

Day 26: green leafy vegetables

Green leafy vegetables are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for green leafy vegetables.

Eat green leafy vegetables at least five times a week. You may eat green leafy vegetables every day.

Recommended green leafy vegetables for daily use include: bok choy (and baby bok choy), carrot tops, celery, Chiense cabbage, chives, collard greens, daikon greens, endive, escarole, kale, leeks, mustard greens, parsley, scallions, **spinach**, turnip greens, and watercress.

Recommended green leafy vegetables for occasional use include: Jerusalem artichoke, lettuce (especially Romaine and red leaf), Romaine lettuce, salsify, and Swiss chard.

As is the case with many plants, the richer and more vibrant the colors of green leafy vegetables, the healthier it is for you. The plant has produced more antioxidants and phytonutrients, which can be helpful in preventing cancer and in helping your body defend itself against cancer and other diseases. You've heard that iceberg lettuce is relatively empty of nutrients. Notice how pale green it looks compared to red leaf lettuce (a much healthier lettuce).

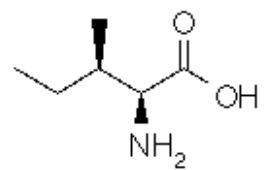
The American Diabetic Association recommends dark green leafy vegetables as one of 10 "superfoods" for those with diabetes. The American Diabetes Association recommends greens (especially collard, kale, mustard, and turnip) as a non-starchy vegetable. The American Diabetes Association recommends salad greens (especially arugula, chicory, endive, escarole, lettuce,

radicchio, Romaine lettuce, spinach, and watercress) as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Green vegetables have vitamin A, vitamin C, carotenoids, lutein, fiber, calcium, and magnesium that help prevent cancer by antioxidant function and immune enhancement.

Dark green leafy vegetables have vitamin D, an essential nutrient in fighting cancer.

The lady demonstrating Boar's Head meat and cheese claimed "salads can be dangerous to your health." While this probably wasn't the official position of the corporation, it does clearly demonstrate the untrustworthiness of the statements made by large food companies.



ile | Isoleucine

isoleucine

isoleucine

L-Isoleucine is a neutral, genetically coded, essential amino acid (meaning that the human body can't produce it on its own). It is essential in human nutrition.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don't have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

scientific information:

three letter abbreviation: ile

one letter abbreviation: i

linear structure formula: $\text{CH}_3\text{-CH}_2\text{-CH}(\text{CH}_3)\text{-CH}(\text{NH}_2)\text{-COOH}$

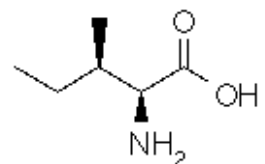
molecular formula: $\text{C}_6\text{H}_{13}\text{NO}_2$

molecular weight: 131.17

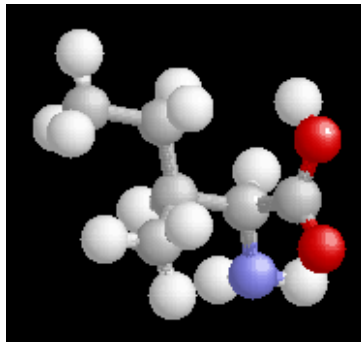
isoelectric point (pH): 5.94 (neutral)

pK_a values: 2.32, 9.76

CAS Registry Number: 73-32-5



ile i Isoleucin



coffee

Day 27: coffee

Remove coffee from your diet (except for rare special occasions).

If you must drink coffee, drink coffee on days related to Mars.

It can be difficult to stop drinking coffee, so you may take a few weeks or months to completely eliminate coffee from your daily diet.

Start by cutting back on how much coffee you drink. Try to cut down to no more than one cup (not a large mug) of coffee a day.

Switch to decaffeinated coffee (although you will want to eventually eliminate that as well).

If you must have a coffee-like taste in your diet, then consider dandelion coffee.

leucine

leucine

L-Leucine is a neutral, genetically coded, essential amino acid (meaning that the human body can't produce it on its own). It is essential in human nutrition.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don't have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

Leucine provides ingredients for the manufacturing of other essential biochemical components in the body, some of which are utilized for the production of energy, stimulants to the upper brain and helping you to be more alert.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: leu

one letter abbreviation: l

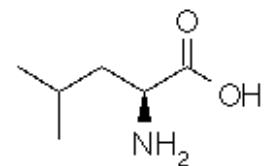
linear structure formula: $(\text{CH}_3)_2\text{-CH-CH}_2\text{-CH(NH}_2\text{)-COOH}$

molecular formula: $\text{C}_6\text{H}_{13}\text{NO}_2$

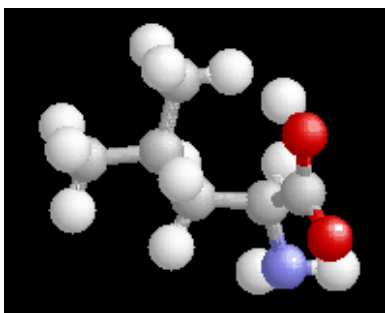
molecular weight: 131.17

isoelectric point (pH): 5.98 (neutral)

CAS Registry Number: 61-90-5



leu | Leucin



Day 28: ground vegetables

ground vegetables

Ground vegetables are sacred to Bast. Honor and thank Bast for ground vegetables.

Eat ground vegetables at least five times a week. You may eat ground vegetables every day.

Recommended ground vegetables for daily use include: **broccoli**, Brussels sprouts, butternut squash, cabbage, cauliflower, fall squashes, garlic, **onion**, **pumpkin**, string beans (also listed under beans), sweet bell pepper, and winter squashes.

Recommended ground vegetables for occasional use include: cucumber, fennel, green peas, kohlrabi, shallot, snow peas, summer squash, zucchini.

lysine

lysine

L-Lysine is a basic, genetically coded, essential amino acid (meaning that the human body can't produce it on its own). It is essential in human nutrition. It is probably the most limited amino acid in the food chain.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don't have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Lysine] insures the adequate absorption of calcium; helps form collagen (which makes up bone cartilage & connective tissues); aids in the production of antibodies, hormones & enzymes. Recent studies have shown that Lysine may be effective against herpes by improving the balance of nutrients that reduce viral growth. A deficiency may result in tiredness, inability to concentrate, irritability, bloodshot eyes, retarded growth, hair loss, anemia & reproductive problems.

—courtesy of [Austin Nutritional Research](#)

scientific information:

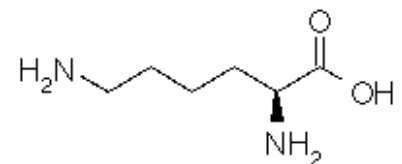
three letter abbreviation: lys

one letter abbreviation: k

linear structure formula: $\text{H}_2\text{N}-(\text{CH}_2)_4-\text{CH}(\text{NH}_2)-\text{COOH}$

molecular formula: $\text{C}_6\text{H}_{14}\text{N}_2\text{O}_2$

molecular weight: 146.19

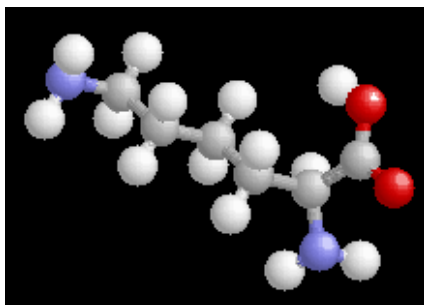


lys k Lysin

isoelectric point (pH): 9.59 (basic)

pK_a values: 2.20, 8.90, 10.28

CAS Registry Number: 56-87-1



Day 29: teas

teas

Tea is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for teas.

Other deities associated with tea include: Buddha (India), Huchi-Fuchi (Japan), Kuan Yin (China), Lu Yu (China), and Shennong (China)

Teas and pure fruit juices should be a daily part of your diet.

Various teas will be discussed in more detail elsewhere.

Replace black tea with green tea, herbal tea, chamomile tea, fennel tea, ginger tea, nettle tea, peppermint tea, and rooibos tea.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Teas are a good prebiotic.

methionine

methionine

L-Methionine is a neutral, genetically coded, essential amino acid (meaning that the human body can't produce it on its own). It is essential in human nutrition.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don't have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Methionine] is a principle supplier of sulfur which prevents disorders of the hair, skin and nails; helps lower cholesterol levels by increasing the liver's production of lecithin; reduces liver fat and protects the kidneys; a natural chelating agent for heavy metals; regulates the formation of ammonia and creates ammonia-free urine which reduces bladder irritation; influences hair follicles and promotes hair growth.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: met

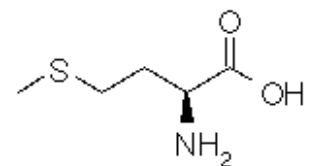
one letter abbreviation: m

linear structure formula: $\text{CH}_3\text{-S-(CH}_2\text{)}_2\text{-CH(NH}_2\text{)-COOH}$

molecular formula: $\text{C}_5\text{H}_{11}\text{NO}_2\text{S}$

molecular weight: 149.21

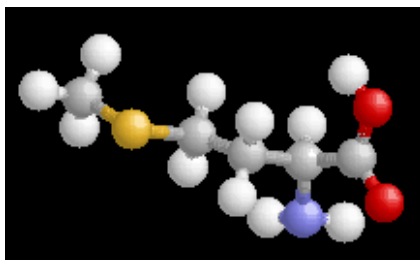
isoelectric point (pH): 5.74 (neutral)



met m Methionin

pK_a values: 2.28, 9.21

CAS Registry Number: 63-68-3



Day 30: root vegetables

root vegetables

Root vegetables are sacred to Bast. Honor and thank Bast for root vegetables.

Eat root vegetables at least five times a week. You may eat root vegetables every day.

Recommended root vegetables for daily use include: burdock, carrots, daikon, ginger root, jinenjo, lotus root, parsnips, red radish, rutabaga, and turnips.

Recommended root vegetables for occasional use include: beets, potato, taro root, sweet potato, and yam.

phenylalanine

phenylalanine

L-Phenylalanine is a neutral, genetically coded, essential amino acid (meaning that the human body can't produce it on its own). It is essential in human nutrition.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don't have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Phenylalanine is] used by the brain to produce Norepinephrine, a chemical that transmits signals between nerve cells and the brain; keeps you awake & alert; reduces hunger pains; functions as an antidepressant and helps improve memory.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: phe

one letter abbreviation: f

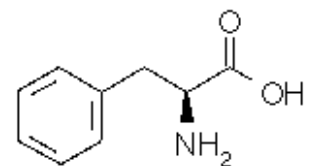
linear structure formula: $\text{Ph-CH}_2\text{-CH(NH}_2\text{)-COOH}$

molecular formula: $\text{C}_9\text{H}_{11}\text{NO}_2$

molecular weight: 165.19

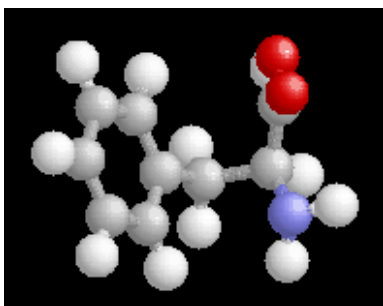
isoelectric point (pH): 5.48 (neutral)

pK_a values: 2.58, 9.24



phe f Phenylalanin

CAS Registry Number: 63-91-2



Day 31: alcohol

alcohol

Alcohol is a chemical.

Alcohol is sacred to Sekhmet. Honor and thank Sekhmet for alcohol.

Greatly reduce or eliminate the use of alcohol, including beer and wine.

history:

History: Human created alcohol is at least 5,000 years old.

The earliest known terra cotta stills were found in what is now Pakistan.



[Barley](#) was popular in ancient Egypt, where it was used to make bread and to make barley beer sweetened with honey. Barley beer is likely to have been the first alcoholic beverage humans made.

By 1000 B.C.E. the Chinese were distilling rice wine.

For centuries in Europe and America, alcohol was mixed with gunpowder and ignited. If the mixture flashed, then the alcohol was “proven”, hence the word “proof” as a measure of alcohol content.

Europeans called distilled beverages distilled “spirits” because of the belief that the essence of the plant was derived while the body of the plant died away.

The Little Ice Age (from the 14th to mid-19th centuries) is the reason that Americans today now drink eleven (11) times as much beer as wine. The lower temperature hurt wine production (grapes required warmer climate) and encouraged the production of beer.

nutritional information:

The **American Diabetic Association** recommends that diabetics limit alcohol.

Drinking alcohol is a major risk factor for heart disease and stroke.

Drinking alcohol is a major risk factor for cancer.

High amounts of alcohol can cause acidosis (acid overload).

Miso soup is particularly useful in helping offset the toxic effects of a diet high in alcohol.

Microbrew beer is a good source of probiotics.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Microbrew beer is a good prebiotic.

Wine is a good source of probiotics.

Red wine is a good source of resveratrol, quercetin and polyphenols.

The alcohol in beer dissolves the chemicals in hot pepers that burn your mouth.

“Low [zinc](#) status has been observed in 30% to 50% of alcoholics”, according to [the U.S. National Institutes of Health](#). “Alcohol decreases the absorption of zinc and increases loss of zinc in urine. In addition, many alcoholics do not eat an acceptable variety or amount of food, so their dietary intake of zinc may be inadequate.”

Chinese herbalism:

Chinese gender: strongly [yin](#) (cool)

cautions and contraindications:

Cautions and contraindications: You want to reduce or eliminate alcohol from your diet.

Alcohol is harmful to the [liver](#) and therefore should be reduced or eliminated from your diet.

Combining alcohol and [tobacco](#) greatly increases the risk of cancer compared to either alcohol or tobacco alone.

Animal cautions and contraindications: Alcohol should never be fed to cats or dogs.

alcoholic beverages:

ale
beer

threonine

threonine

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

L-Threonine is a neutral, genetically coded, essential amino acid (meaning that the human body can’t produce it on its own). It is essential in human nutrition.

[Threonine] is an important constituent of collagen, Elastin, and enamel protein; helps prevents fat build-up in the liver; helps the digestive and intestinal tracts function more smoothly; assists metabolism and assimilation.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: thr

one letter abbreviation: t

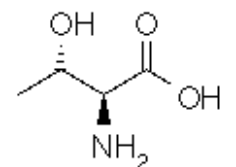
linear structure formula: $\text{CH}_3\text{-CH(OH)-CH(NH}_2\text{)-COOH}$

molecular formula: $\text{C}_4\text{H}_9\text{NO}_3$

molecular weight: 119.12

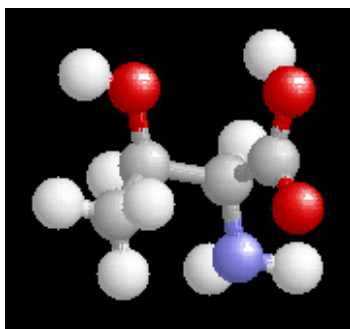
isoelectric point (pH): 5.64 (neutral)

pK_a values: 2.15, 9.12



thr t Threonin

CAS Registry Number: 72-19-5



Day 32: beans and legumes

beans and legumes

Beans and legumes are sacred to Bast. Honor and thank Bast for beans and legumes.

Eat beans and legumes at least three to five times a week. You may eat beans and legumes every day.

Recommended beans and legumes include: azuki beans, black beans, black-eyed peas, black turtle beans, broad beans, chick-peas (garbonzo beqans), great northern beans, green peas, kidney beans, lentils, lima beans, mung beans, navy beans, pinto beans, red beans, soya beans (and soya products), string beans, and sugar snap peas.

The American Diabetic Association recommends beans as one of 10 “superfoods” for those with diabetes. The American Diabetes Association recommends dried beans several times per week as a protein source.

Bay leaf goes well with beans and soups.

Spices that go well with dried beans include .cumin, cayenne, chili, parsley, pepper, sage, savory, and thyme.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Beans are a good prebiotic.

tryptophan

tryptophan

L-Tryptophan is a neutral, genetically coded, essential amino acid (meaning that the human body can't produce it on its own). It is essential in human nutrition.

Trptophan and triptophan are mis-spellings.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don't have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

Tryptophan is a natural sedative, but contrary to popular myth, the tryptophan in turkey does not cause Thanksgiving Day drowsiness. There isn't enough tryptophan in turkey to have that effect. For the amino acid tryptophan to work on the brain, the stomach must be empty and have no amino acids present.

[Tryptophan is] a natural relaxant, helps alleviate insomnia by inducing normal sleep; reduces anxiety & depression; helps in the treatment of migraine headaches; helps the immune system; helps reduce the risk of artery & heart spasms; works with Lysine in reducing cholesterol levels.

—courtesy of [Austin Nutritional Research](#)

Sources of tryptophan include: bananas, beans, chocolate, dried dates, hemp seed meal, oats, peanuts, sesame, and soy beans.

Additional sources of tryptophan (that should be avoided because they are animal products) include: fish, meat, milk, yogurt, cottage cheese, beef, chicken, and turkey.

scientific information:

Tryptophan is a precursor for serotonin (a neurotransmitter), melatonin (a neurohormone), and niacin. The functional group of tryptophan is indole.

three letter abbreviation: trp

one letter abbreviation: w

linear structure formula: $\text{Ph-NH-CH=C-CH}_2\text{-CH(NH}_2\text{)-COOH}$

molecular formula: $\text{C}_{11}\text{H}_{12}\text{N}_2\text{O}_2$

systematic name: (S)-2-Amino-3-(1H-indol-3-yl)-propanoic acid

molecular mass: $204.23 \text{ g mol}^{-1}$

molecular weight: 204.23

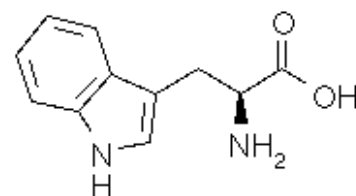
melting point: 289°C

isoelectric point (pH): 5.89 (neutral)

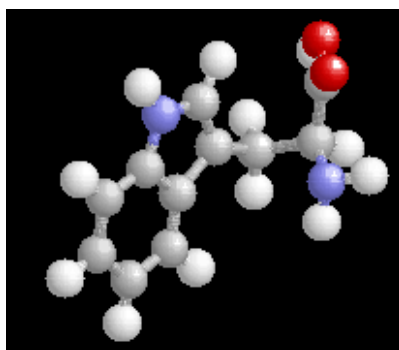
pK_a values: 2.38, 9.39

CAS Registry Number: 73-22-3

EINECS Registry Number 200-795-6



trp w Tryptophan



Ayurvedic herbalism:

According to Dr. Ram of [The Healing Gardens](#), “L TRYPTOPHAN: Helps relax, promotes healthier sleep patterns. It is a precursor to serotonin. Low serotonin levels in the brain can cause irritability, anxiety, and sleeplessness.”

Day 33: soup

soup

Soup is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for soup.

Eat one or two servings of fresh made soup per day. The recommended serving of miso soup can count as one of the servings of fresh made soup.

Bay leaf goes well with beans and soups.

valíne

valine

L-Valine is a neutral, genetically coded, essential amino acid (meaning that the human body can't produce it on its own). It is essential in human nutrition.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don't have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Valine] promotes mental vigor, muscle coordination and calm emotions.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: val

one letter abbreviation: v

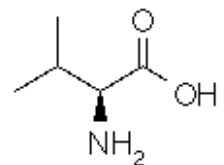
linear structure formula: $(\text{CH}_3)_2\text{-CH-CH}(\text{NH}_2)\text{-COOH}$

molecular formula: $\text{C}_5\text{H}_{11}\text{NO}_2$

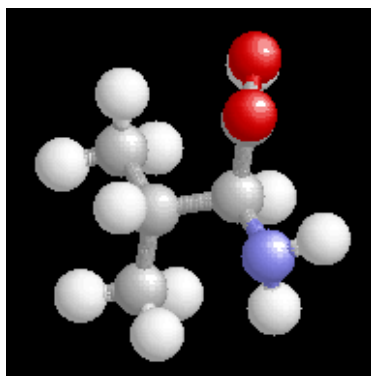
molecular weight: 117.15

isoelectric point (pH): 5.96 (neutral)

CAS Registry Number: 72-18-4



val v Valin



Day 34: garlic

garlic

Garlic is sacred to Bast. Honor and thank Bast for garlic.

Eat at least one serving of garlic per week, taking in account the season and local availability. You may eat garlic daily.

Garlic is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Garlic is a good prebiotic.

Nobody in history has ever died of an overdose of garlic.

Garlic goes well with bread and fish.

alanine

alanine

L-Alanine is a neutral, genetically coded, non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Alanine] is an important source of energy for muscle tissue, the brain and central nervous system; strengthens the immune system by producing antibodies; helps in the metabolism of sugars and organic acids.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: ala

one letter abbreviation: a

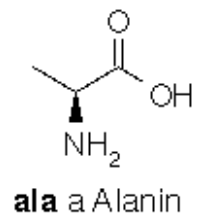
linear structure formula: $\text{CH}_3\text{-CH}(\text{NH}_2)\text{-COOH}$

molecular formula: $\text{C}_3\text{H}_7\text{NO}_2$

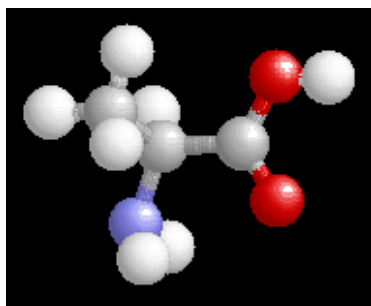
molecular weight: 89.09

isoelectric point (pH): 6.00 (neutral)

pK_a values: 2.35, 9.87



CAS Registry Number: 56-41-7



Day 35: fruit and vegetable juices

fruit and vegetable juices

Fruit and vegetable juices are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for fruit and vegetable juices.

Avoid store bought carton juices. As a transition to the Goddess Diet Plan you may have these store bought juices mixed 50% with water.

Eventually you will want to switch to homemade fruit and vegetable juices.

Juicing removes the fiber, so raw fruits and vegetables are healthier.

To get the maximum health benefits, you should drink fruit and vegetable juices within 20-30 minutes of juicing.

arginine

arginine

L-Arginine is a basic, genetically coded, semi-essential amino acid (meaning that the human body can produce it on its own with proper nutrition). It is essential for human development.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

Studies have shown that [arginine] has improved immune responses to bacteria, viruses & tumor cells; promotes wound healing and regeneration of the liver; causes the release of growth hormones; considered crucial for optimal muscle growth and tissue repair.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: arg

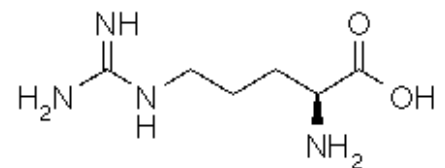
one letter abbreviation: r

linear structure formula: $\text{HN}=\text{C}(\text{NH}_2)\text{-NH-}(\text{CH}_2)_3\text{-CH}(\text{NH}_2)\text{-COOH}$

molecular formula: $\text{C}_6\text{H}_{14}\text{N}_4\text{O}_2$

molecular weight: 174.20

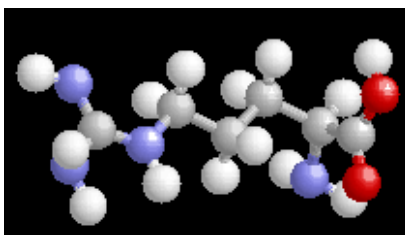
isoelectric point (pH): 11.15 (basic)



arg r Arginin

pK_a values: 2.18, 9.09, 13.2 (*guanidine*)

CAS Registry Number: 74-79-3



Day 36: whole grains

whole grains

Whole grains are sacred to Bast, Aset (Isis), Aset's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for whole grains.

Eat whole grains at least three to five times a week. You may eat whole grains every day.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Recommended whole grains include: amaranth, barley, brown rice, buckwheat (not part of the same botanical family, but counts as a whole grain), bulghar wheat (also called cracked wheat), corn (not part of the same botanical family, but counts as a whole grain), couscous, kamut, millet, **oats**, **quinoa**, rye, sorghum, teff, spelt, triticale, wheat, **wheat germ**, and wild rice (not part of the same botanical family, but counts as a whole grain).

Persons with celiac disease (gluten-intolerant) should avoid wheat, rye, and barley.

For more than thousands of years (since the start of the agricultural revolution and the beginning of civilization) whole cereal grains have been our primary food, the Staff of Life.

In recent decades the diet has switched from healthy whole grains to unhealthy polished grains.

Macrobiotics recommends that whole grain foods (such as barley, brown rice, millet, and whole wheat berries) be a primary food source, included in every meal.

The American Diabetic Association recommends whole grains as one of 10 “superfoods” for those with diabetes.

It is much healthier to get whole grains rather than whole grain products. Diabetics may want to eliminate or limit grain products and switch to whole grains.

When choosing a grain product (such as bread or cereal), look for a whole grain as the number one ingredient on the ingredient list. Ignore corporate advertisements on the front of the package.

It is absurd to consider whole grain PopTarts to be in any way healthy.

asparagine

asparagine

L-Asparagine is a neutral, genetically coded, non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

The amino acid asparagine is named for asparagus.

Sources of asparagine include: asparagus

scientific information:

three letter abbreviation: asn

one letter abbreviation: n

linear structure formula: $\text{H}_2\text{N}-\text{CO}-\text{CH}_2-\text{CH}(\text{NH}_2)-\text{COOH}$

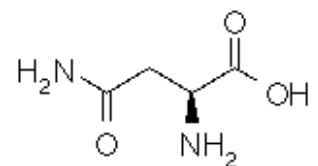
molecular formula: $\text{C}_4\text{H}_8\text{N}_2\text{O}_3$

molecular weight: 132.12

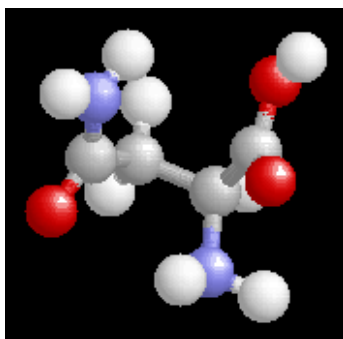
isoelectric point (pH): 5.41 (neutral)

pK_a values: 2.02, 8.80

CAS Registry Number: 70-47-3



asn n Asparagin



Day 37: green tea

green tea

Green tea is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for green tea.

Other deities associated with tea include: Buddha (India), Huchi-Fuchi (Japan), Kuan Yin (China), Lu Yu (China), and Shennong (China)

Drink green tea at least once per week, preferably daily.

Switch from black tea to green tea.

Green tea, herbal teas, and pure organic fruit juices should be a regular part of your daily diet. Each meal should include at least one of the three.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Green tea is a good prebiotic.

aspartic acid

aspartic acid

L-Aspartic acid is an acidic, genetically coded, non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Aspartic acid] aids in the expulsion of harmful ammonia from the body. When ammonia enters the circulatory system it acts as a highly toxic substance which can be harmful to the central nervous system. Recent studies have shown that Aspartic Acid may increase resistance to fatigue and increase endurance.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: asp

one letter abbreviation: d

linear structure formula: $\text{HOOC-CH}_2\text{-CH(NH}_2\text{)-COOH}$

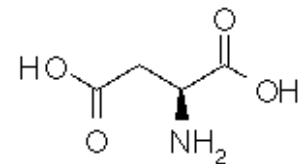
molecular formula: $\text{C}_4\text{H}_7\text{NO}_4$

molecular weight: 133.10

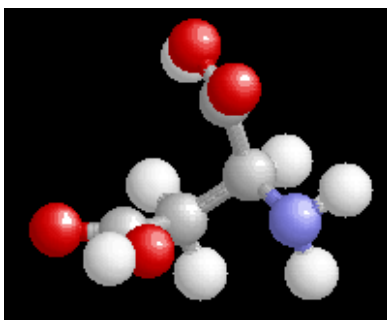
isoelectric point (pH): 2.77 (acidic)

pK_a values: 1.88, 3.65, 9.60

CAS Registry Number: 56-84-8



asp d Asparaginsaeure



Day 38: sea vegetables (seaweed)

sea vegetables (seaweed)

Sea vegetables and seaweed are sacred to Aset (Isis). Honor and thank Aset for sea vegetables and seaweeds.

Eat sea vegetables at least three to five times a week, taking in account the season and local availability. You may eat sea vegetables every day.

Recommended sea vegetables include: agar-agar, arames, Corsican seaweed, dulse, hijiki, Irish moss, kombu, nori, ocean ribbons, sea palm, and wakame (including mekabu and nekombu).

You may combine sea vegetables (especially arame) with miso soup.

Seaweed is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

cysteine

cysteine

L-Cysteine is a neutral, genetically coded, semi-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Cysteine] functions as an antioxidant and is a powerful aid to the body in protecting against radiation and pollution. It can help slow down the aging process, deactivate free radicals, neutralize toxins; aids in protein synthesis and presents cellular change. It is necessary for the formation of the skin, which aids in the recovery from burns and surgical operations. Hair and skin are made up 10-14% Cystine.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: cys

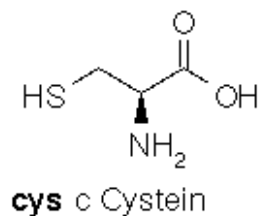
one letter abbreviation: c

linear structure formula: HS-CH₂-CH(NH₂)-COOH

molecular formula: C₃H₇NO₂S

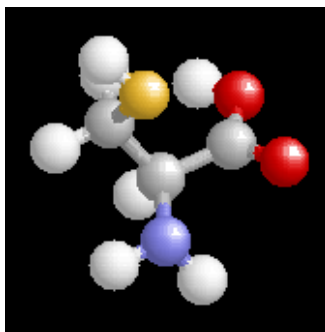
molecular weight: 121.15

isoelectric point (pH): 5.02 (neutral)



pK_a values: 1.71, 8.33 (*thiol*), 10.78

CAS Registry Number: 52-90-4



Day 39: herbal tea

herbal tea

Herbal teas are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for herbal teas.

Drink herbal tea at least once per week.

glutamic acid

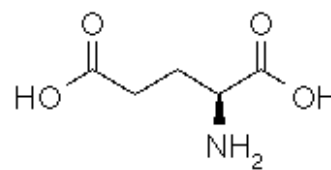
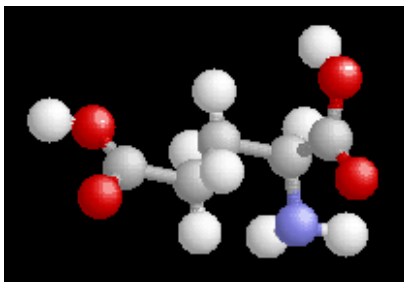
L-Glutamic acid is an acidic, genetically coded, non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

Considered to be nature’s “Brain food” by improving mental capacities; helps speed the healing of ulcers; gives a “lift” from fatigue; helps control alcoholism, schizophrenia and the craving for sugar.

—courtesy of [Austin Nutritional Research](#)

scientific information:**three letter abbreviation:** glu**one letter abbreviation:** e**linear structure formula:** $\text{HOOC}-(\text{CH}_2)_2-\text{CH}(\text{NH}_2)-\text{COOH}$ **molecular formula:** $\text{C}_5\text{H}_9\text{NO}_4$ **molecular weight:** 147.13**isoelectric point (pH):** 3.22 (acidic)**pK_a values:** 2.19, 4.25, 9.67**CAS Registry Number:** 56-86-0**glu** e Glutaminsäure

Day 40: seeds and nuts

seeds and nuts

Seeds and nuts are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for seeds and nuts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

“The plant reveals what is in the seed.” —Proverb of the Inner Temple of ancient Egypt

Eat seeds and nuts daily. it is important to have a variety of nuts and not repeat the same nuts every day.

Recommended seeds and nuts include: **almonds**, cashews, chestnuts, **flaxseed**, hazelnuts, **hempseed**, peanuts, pecans, pine nuts, pistachios, pumpkin seeds, sesame seeds, squash seeds, sunflower seeds, and **walnuts**.

Recommended seeds and nuts for occasional use include: acorns, alfalfa seeds, apricot seeds, beechnuts, Brazil nuts, ground nuts, hickory nuts, macadamia nuts, plum seeds, poppy seeds, and umeboshi seeds.

The American Diabetic Association recommends nuts as one of 10 “superfoods” for those with diabetes.

daily seed mix

daily seed mix

Seeds are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and het Heret for seeds.

Make a daily seed mix. Some experts prefer whole seeds, while others prefer freshly ground seeds (immediately before use). One compromise is to use half the mix whole and freshly grind the other half.

It is best to use only organic seeds.

The basic ratio recommended by the Goddess Diet Plan is about 30% hemp seed, about 25% flaxseed, about 15% sesame seed, about 15% pumpkin seed, and about 15% sunflower seed. Feel free to vary things up with other seeds.

Try six (6) ounces of sesame, pumpkin, and sunflower seeds and 9-12 ounces of hemp and flax seeds.

An easy way to mix the seeds is to place them in a clean sealed glass jar and shake.

Use a small coffee grinder for fresh grinding your daily seed mix. Don't use the coffee grinder for coffee, as the coffee beans will overpower the seeds (and you should be getting away from drinking coffee anyway). Use the seed mix immediately after the seeds are ground because as soon as they are exposed to air they will start oxidizing and going bad.

Day 41: rooibos tea

rooibos tea

Rooibos tea is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for rooibos tea.

Drink rooibos tea at least once per week.

glutamine

glutamine

L-Glutamine is a neutral, genetically coded, non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

scientific information:

three letter abbreviation: gln

one letter abbreviation: q

linear structure formula: $\text{H}_2\text{N}-\text{CO}-(\text{CH}_2)_2-\text{CH}(\text{NH}_2)-\text{COOH}$

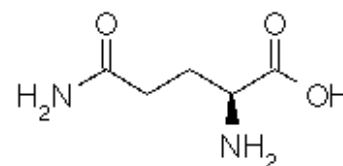
molecular formula: $\text{C}_5\text{H}_{10}\text{N}_2\text{O}_3$

molecular weight: 146.15

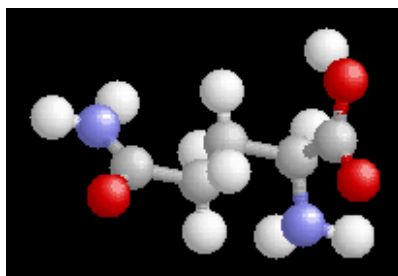
isoelectric point (pH): 5.65 (neutral)

pK_a values: 2.17, 9.13

CAS Registry Number: 56-85-9



gln q Glutamin



Day 42: tumeric

tumeric

Tumeric is sacred to Bast. Honor and thank Bast for tumeric.

Eat tumeric at least once per week. You may eat tumeric every day.

Tumeric is typically used as a spice or herb. Tumeric is the spice that gives curry its yellow color.

Tumeric helps prevent skin wrinkles by fighting free radicals and tumeric helps keep skin smooth.

glycine

glycine

Glycine is a neutral, genetically coded non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition). It is the only protein-forming amino acid without a center of chirality.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Glycine] helps trigger the release of oxygen to the energy requiring cell-making process; Important in the manufacturing of hormones responsible for a strong immune system.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: gly

one letter abbreviation: g

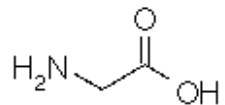
linear structure formula: $\text{NH}_2\text{-CH}_2\text{-COOH}$

molecular formula: $\text{C}_2\text{H}_5\text{NO}_2$

molecular weight: 75.07

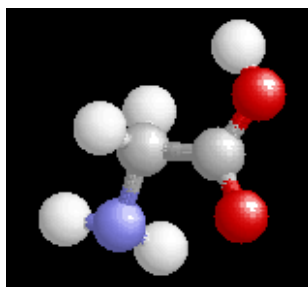
isoelectric point (pH): 5.97 (neutral)

pK_a values: 2.21, 9.15



gly g Glycin

CAS Registry Number: 56-40-6



Day 43:

mushrooms

mushrooms

Mushrooms are sacred to Bast. Honor and thank Bast for mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked mushrooms per day, taking in account the season and local availability. Eat wild mushrooms, if available.

Do not eat raw mushrooms. Eat cooked mushrooms. Emphasize Asian mushrooms and cut back on button, crimini, and portobello mushrooms.

The American Diabetes Association recommends mushrooms as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Mushrooms are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

histidine

histidine

L-Histidine is a basic, genetically coded semi-essential amino acid (meaning that the human body can produce it on its own with proper nutrition). It is essential for human development.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Histidine] is found abundantly in hemoglobin; has been used in the treatment of rheumatoid arthritis, allergic diseases, ulcers & anemia. A deficiency can cause poor hearing.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: his

one letter abbreviation: h

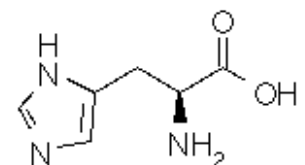
linear structure formula: $\text{NH}-\text{CH}=\text{N}-\text{CH}=\text{C}-\text{CH}_2-\text{CH}(\text{NH}_2)-\text{COOH}$

molecular formula: $\text{C}_6\text{H}_9\text{N}_3\text{O}_2$

molecular weight: 155.16

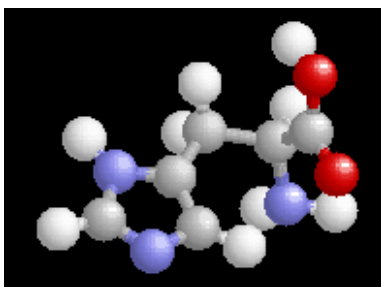
isoelectric point (pH): 7.47 (basic)

pK_a values: 1.78, 5.97 (*imidazole*), 8.97



his h Histidin

CAS Registry Number: 71-00-1



Day 44: fried food

fried food

Stop eating, or at least cut back on and avoid, fried foods.

“Deep frying is a common cooking method used across the globe. Restaurants and fast-food chains often use it as a quick and inexpensive way to prepare foods.

Popular fried foods include fish, french fries, chicken strips, and cheese sticks, although you can deep-fry just about anything.

Many people like the taste of fried foods. But these foods tend to be high in calories and trans fat, so eating a lot of them can negatively affect your health.

Compared to other cooking methods, deep frying adds a lot of calories.

Fried foods are typically coated in batter or flour before being fried. And when foods are fried in oil, they lose water and absorb fat, which further increases their calorie content.

Generally speaking, fried foods are significantly higher in fat and calories than their non-fried counterparts.

For example, one small baked potato (138 grams [g]) contains 128 calories and 0.18 g of fat, while the same amount (138 g) of french fries contains 431 calories and 20 g of fat.

As another example, a 100-g fillet of baked cod contains 105 calories and 1 g of fat, while the same amount of deep-fried fish contains 200 calories and 10 g of fat.

Trans fats form when unsaturated fats undergo a process called hydrogenation.

Food manufacturers often hydrogenate fats using high pressure and hydrogen gas to increase their shelf life and stability, but hydrogenation also occurs when oils are heated to very high temperatures during cooking.

The process changes the chemical structure of fats, making them difficult for your body to break down, which can ultimately lead to negative health effects.

In fact, trans fats are associated with an increased risk of many health conditions, including heart disease, cancer, diabetes, and obesity.

Since fried foods are cooked in oil at extremely high temperatures, they are likely to contain trans fats.

What's more, fried foods are often cooked in processed vegetable or seed oils, which may contain trans fats before heating.

When these oils are heated to high temperatures, such as during frying, their trans fat content can increase.

In fact, one study found that each time an oil is reused for frying, its trans fat content increases.

However, it's important to distinguish between these artificial trans fats and trans fats that occur naturally in foods such as meat and dairy products.

These have not been shown to have the same negative health effects as those found in fried and processed foods.

Several studies in adults have found an association between eating fried foods and the risk of chronic disease.

Generally speaking, eating more fried foods is associated with a greater risk of developing type 2 diabetes, heart disease, and obesity.

Eating fried foods may contribute to high blood pressure, low HDL ("good") cholesterol, and obesity, all of which are risk factors for heart disease.

In fact, two large, older observational studies found that the more often people ate fried foods, the greater their risk of developing heart disease was.

One 4-year study with 16,479 participants concluded that eating 2 servings of fried fish per week is associated with a higher risk of cardiovascular disease.

Meanwhile, those who ate a diet high in fruits and vegetables had a significantly lower risk.

Several older studies have found that eating fried foods increases the risk of developing type 2 diabetes.

A 2005 study found that people who ate fast food more than twice per week were twice as likely to develop insulin resistance as those who ate it less than once per week.

Furthermore, in 2014, two large observational studies found a strong association between how often participants ate fried food and their risk of type 2 diabetes.

Those consuming 4-6 servings of fried food per week were 39% more likely to develop type 2 diabetes than those consuming less than 1 serving per week.

Similarly, those who ate fried food 7 or more times per week were 55% more likely to develop type 2 diabetes than those who ate less than 1 serving per week.

Fried foods contain more calories than their non-fried counterparts, so eating a lot of them can significantly increase your calorie intake. This can contribute to weight gain.

Furthermore, studies indicate that the trans fats in fried foods may play a significant role in weight gain, as they can affect the hormones that regulate appetite and fat storage.

Regardless of whether it's due to high calorie content or high trans fat content, multiple observational studies have shown a positive association between fried food intake and obesity.

Acrylamide is a toxic substance that can form in foods during high temperature cooking such as frying, roasting, or baking.

It is formed by a chemical reaction between sugars and an amino acid called asparagine.

Starchy foods such as fried potato products and baked goods typically have higher

concentrations of acrylamide.

An older animal study suggests that it poses a risk for several types of cancer.

However, most of these earlier studies used very high doses of acrylamide, 1,000–100,000 times the average amount that humans would be exposed to through diet.

While a handful of human studies have investigated acrylamide intake, the evidence is mixed.

One review found a modest association between dietary acrylamide in humans and kidney, endometrial, and ovarian cancers.

Other studies indicate that dietary acrylamide in humans is not related to the risk of any common type of cancer.

If you enjoy the taste of fried foods, consider cooking them at home using healthier oils or alternative “frying” methods.

The type of oil used for frying heavily influences the health risks associated with fried foods. Some oils can withstand much higher temperatures than others and are therefore safer to use.

Generally speaking, oils that consist mostly of saturated and monounsaturated fats are the most stable when heated.

Coconut, olive, and avocado oils are among the safest and most stable for frying:

Coconut oil: More than 90% of the fatty acids in coconut oil are saturated, which means this oil is very resistant to heat. In fact, studies have shown that even after 8 hours of continuous deep frying, its quality does not deteriorate.

Olive oil: Olive oil contains mostly monounsaturated fats, so it's relatively stable for high temperature cooking.

Avocado oil: The composition of avocado oil is similar to that of olive oil. It also has an extremely high heat tolerance, which makes it a great choice for deep frying.

Using these healthier oils may decrease some of the risks associated with eating fried foods. But note that these are the most stable oils for frying, not necessarily the most nutritious ones in general.

Cooking oils that contain large amounts of polyunsaturated fats are far less stable and are known to form acrylamide when exposed to high heat (29Trusted Source).

Examples include:

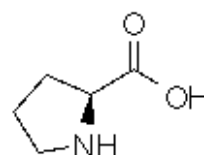
- canola oil
- soybean oil
- cottonseed oil
- corn oil
- sesame oil
- sunflower oil
- safflower oil
- grapeseed oil
- rice bran oil

Restaurants commonly use these oils because they tend to be cheaper. But you should avoid these oils for deep frying at home.

You may also want to consider alternative cooking methods such as:

Oven-frying: This method involves baking foods at a very high temperature (450°F or 232°C), which allows foods to get crispy using little or no oil.

Air-frying: You can also “fry” foods in a hot air fryer. These machines work by circulating extremely hot air around food. The foods end up crispy on the outside and very moist on the inside, similar to traditionally fried foods, with the use of 70-80% less oil.” —[healthline](#)



pro p Prolin

proline

proline

L-Proline is a neutral, genetically coded, non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition). It is the only protein-forming amino acid with a secondary amino group.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Proline] is extremely important for the proper functioning of joints and tendons; also helps maintain and strengthen heart muscles.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: pro

one letter abbreviation: p

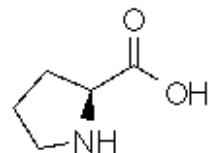
linear structure formula: $\text{NH}-(\text{CH}_2)_3-\text{CH}-\text{COOH}$

molecular formula: $\text{C}_5\text{H}_9\text{NO}_2$

molecular weight: 115.13

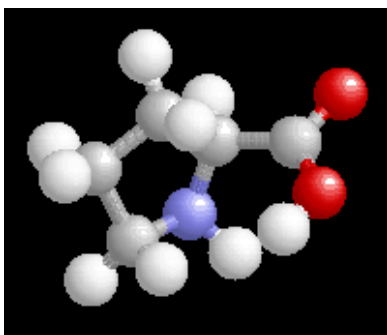
isoelectric point (pH): 6.30 (neutral)

pK_a values: 1.99, 10.60



pro p Prolin

CAS Registry Number: 147-85-3



Day 45: hemp seed

hemp seed

Hemp seed is sacred to Bast. Honor and thank Bast for hemp seed.

Hemp is also associated with the Chinese Hemp Maid Ma Gu.

Eat at least one serving of hempseed per week, taking in account the season and local availability.

Hemp seeds are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Note that hemp seed is made from the same cannabis plant that produces marijuana. While hemp seed contains no THC, it does contain natural cannabinoids. Inexpensive drug tests check for cannabinoids rather than THC and will therefore present a false positive if you consume hemp seed for nutritional, health, and/or religious purposes.

botanical information:

Cannabis hemp is a dioecious plant (meaning that an individual plant can be male or female). Both male and female hemp plants produce good quality fiber, but the female produces the best religious quality cannabinoids.

Botanical name: *Cannabis sativa* or *Cannabis indica*

Common name: cannabis, hemp, marijuana

- *Cannabis indica* shorter plant and thicker leaves



than sativa

- *Cannabis ruderalis* lower quality plant commonly known as “dirt weed”
- *Cannabis sativa* taller plant and thinner leaves than indica

shem-shem-tu
sm-sm-t
hieroglyphs for cannabis

origin:

Origin: The place of origin of cannabis hemp is unknown, but is believed to have been somewhere in Asia, possibly in Benghali India.

history:

History: Cannabis seeds were used for food in China by 6000 B.C.E. and for textiles in China by 4000 B.C.E.

Cannabis was commonly grown in ancient Egyptian temple gardens.

nutritional information:

Hemp seed meal is one of the best sources of protein.

religious use

Cannabis pollen was found on the mummy of Ramses II (nineteenth dynasty). Initially scholars debated as to whether the cannabis pollen was ancient origin or modern contamination. Additional research showed cannabis pollen in all known royal mummies. No known ancient Egyptian mummies were wrapped in hemp cloth.

The intoxicating properties of cannabis were virtually unknown among Europeans (other than among witches) until the eighteenth century (1700s) when travellers to Egypt discovered the drug. European witches knew of cannabis from antiquity, when cannabis was one of the most commonly used medications among Celts and Norse.

The Smoke Eaters at the temple at Thebes used cannabis incense for mortality rituals.



The ancient Egyptian goddess Seshat (above in her role as the Goddess who measures) is depicted with a hemp leaf in her head dress. Pharaoh Tuthmosis III (1479 to 1425 B.C.E.) called her Sefkhet-Abwy (She of the seven points). Hemp was used to make measuring cords. Seshat was the goddess of libraries, knowledge, and geomancy, among other things. Spell 10 of the Coffin text states “Seshat opens the door of heaven for you”.

deities associated with cannabis:

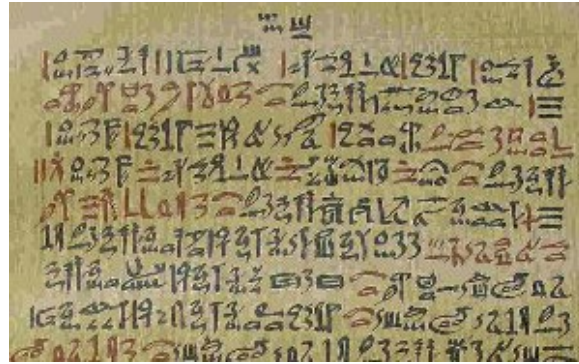
- Bast (Kemetic/ancient Egyptian Goddess)
- Seshat (Kemetic/ancient Egyptian Goddess)
- Shiva (Hindu God)

medicinal uses:

Cannabis was first documented in Kemet (ancient Egypt) around 2000 B.C.E. to treat sore eyes

and cataracts. According to Diodorus Siculus (a Sicilian Greek historian who lived from 90 to 21 B.C.E.) Egyptian women used cannabis as a medication to relieve sorrow and bad humour.

Cannabis is mentioned as a medication in the following ancient Egyptian medical texts: Ramesseum III Papyrus (1700 B.C.E.), Eber's Papyrus (1600 B.C.E.), the Berlin Papyrus (1300 B.C.E.), and the Chester Beatty VI Papyrus (1300 B.C.E.). The Eber's Papyrus is the oldest known complete medical textbook in existence. Most scholars believe that it is copy of a much earlier text, probably from around 3100 B.C.E.

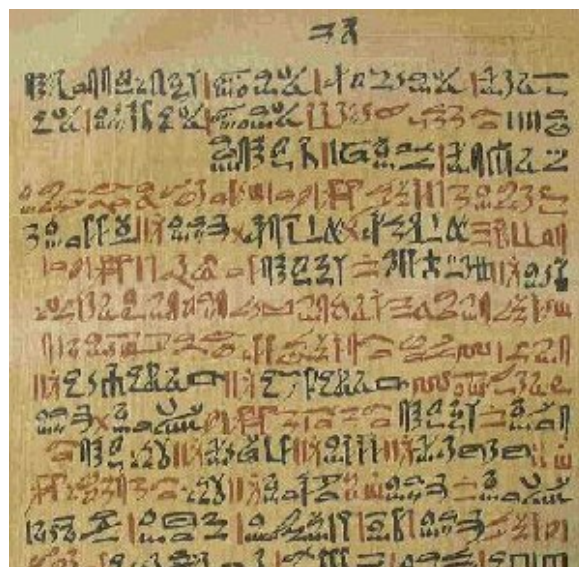


section of Eber's Papyrus, Formula No. 821
Location Plate #96, Lines 7-8

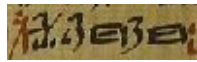


text in Demotic script (the people's script)

Formula No. 821 translation: "Cannabis is pounded [ground] in honey and administered into her vagina. This is a contraction." The 1907 Merck Index (page 132) lists emulsions of cannabis seeds to treat the effects of gonorrhea. The 1909 King's American Dispensatory lists hemp seed infusion for use in after-pains and in the bearing down sensation accompanying prolapsus uteri. The 1927 U.S. Dispensatory lists hemp seed oil for inflammations of the mucous membrane.



section of Eber's Papyrus, Formula No. 618
Location Plate #78, Lines 10-11



text in Demotic script (the people's script)

Formula No. 618 translation: “Remedy for toe-nail (or fingernail). Ingredients honey, ochre cannabis, and [other ingredients which have not yet been translated]”



The example on the left is the oldest known apothecary jar. It contained traces of hashish. The face is of the Pygmy god Bes (who became an Egyptian god of medicine).



An ancient carving of the Egyptian physician Hesi Re from approximately 2650 B.C.E.

Also in the Eber's Papyrus, a mixture of cannabis and carob was used as an enema or combined with other ingredients for use as a poultice.

The Ramses III Papyrus provides a prescription for cannabis use in the treatment of glaucoma: “A treatment for the eyes: celery, cannabis is ground and left in the dew overnight. Both eyes of the patient are to be washed with it in the morning.”

Cautions and contraindications: Cannabis is **safe**.

The DEA's own conservative administrative law judge, Francis Young, after taking medical testimony for 15 days and reviewing hundreds of DEA/NIDA documents positioned against the evidence introduced by marijuana reform activists, concluded in September 1988 that “marijuana is one of the safest therapeutically active substances known to man.” —*The Emperor Wears No Clothes*, Jack Herer

seríne

serine

Serine is a neutral, genetically coded, non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Serine is] a storage source of glucose by the liver and muscles; helps strengthen the immune system by providing antibodies; synthesizes fatty acid sheath around nerve fibers.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: ser

one letter abbreviation: s

linear structure formula: HO-CH₂-CH(NH₂)-COOH

molecular formula: C₃H₇NO₃

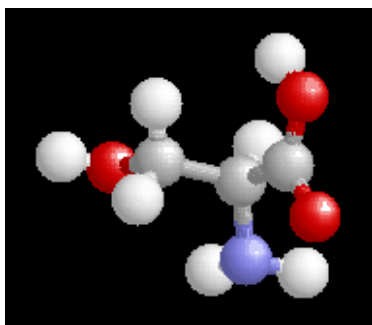
molecular weight: 105.09

isoelectric point (pH): 5.68 (neutral)

pK_a values: 2.21, 9.15



CAS Registry Number: 56-45-1



Day 46: fast food

fast food

Stop eating, or at least cut back on and avoid, fast foods.

tauríne

taurine

Taurine is a non-essential amino acid (meaning that the human body can produce it on its own with proper nutrition).

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

Helps stabilize the excitability of membranes which is very important in the control of epileptic seizures.Ê Taurine and sulfur are considered to be factors necessary for the control of many biochemical changes that take place in the aging process; aids in the clearing of free radical wastes.

—courtesy of [Austin Nutritional Research](#)

Day 47: cereal

cereal

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen floor as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

align="left"> Almost all breakfast cereals are really breakfast candies. During your transition to a healthy diet you will want to cut back on breakfast cereals and switch to healthier breakfast choices. Eventually you will want to give up breakfast cereals completely (other than whole grains such as slow cooked oatmeal).

Healthier breakfast cereals will be those that emphasize whole grains, especially otas and bran.

Read labels carefully. The worst major brand culprit is Raisin Bran, whether from Kellog's, Post, or Kroger (or any of their house brands, such as Ralphs). The sticky white sugar coating on the raisins turn this cereal into a worse sugar offender than many kinds of candy! Kroger packs in high fructose corn syrup, sugar, salt, *and* malted barley syrup. Raisin Bran has 19 grams of sugar per serving, the most of any major brand. More sugar per serving than Apple Jacks (12g.), Cap'n Crunch (12g.), Cocoa Krispies (12g.), Cocoa Pebbles (11g.), Cocoa Puffs (11g.), Corn Flakes (10g.), Frosted Flakes (11g.), Frosted Mini Wheats (Big Bite) (10g.), Fruit Loops (12g.), Fruity Pebbles (11g.), Honey Nut Cheerios (9g.), Honey Smacks (15g.), Lucky Charms (11g.), Reese's Puffs (11g.), or Trix (11g.).

Instead of cow's milk, use (in order of preference) soy-yogurt, hemp seed milk, unsweetened almond milk, reduced-fat yogurt, unsweetened rice milk, or unsweetened soy milk.

Sweeten with a few drops of stevia instead of sugar.

Sprinkle with fresh cliced fruit, dried fruit, frozen fruit, chopped walnuts, fresh ground flaxseed, ground sesame seeds, or chia.

tyrosine

tyrosine

L-Tyrosine is a neutral, genetically coded, semi-essential amino acid (meaning that the human body can produce it on its own with proper nutrition). It is marginally soluble in water.

nutritional information:

When referring to amino acids, the words “essential” and “non-essential” don’t have their normal meanings. Essential amino acids are amino acids that the human body can *not* produce on its own and must gather from food sources. Non-essential amino acids are amino acids that the human body can produce on its own. Both kinds are required for human health.

[Tyrosine] transmits nerve impulses to the brain; helps overcome depression; Improves memory; increases mental alertness; promotes the healthy functioning of the thyroid, adrenal and pituitary glands.

—courtesy of [Austin Nutritional Research](#)

scientific information:

three letter abbreviation: tyr

one letter abbreviation: y

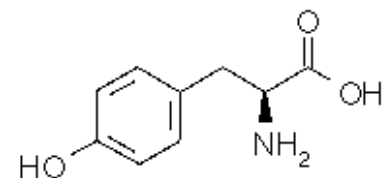
linear structure formula: HO-p-Ph-CH₂-CH(NH₂)-COOH

molecular formula: C₉H₁₁NO₃

molecular weight: 181.19

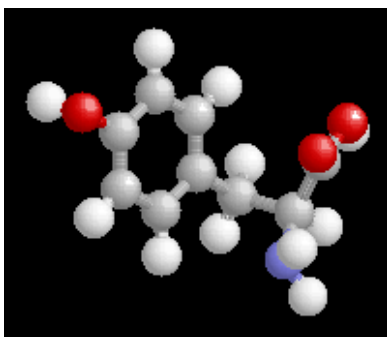
isoelectric point (pH): 5.66 (neutral)

pK_a values: 2.20, 9.11, 10.07 (*phenol*)



tyr y Tyrosin

CAS Registry Number: 60-18-4



Day 48: cilantro

cilantro

The coriander seed comes from the cilantro plant.

Cilantro is sacred to Bast. Honor and thank Bast for cilantro.

Scientific and botanical name: *Coriander sativum*

Eat at least three servings of cilantro per week, taking in account the season and local availability.

Cilantro is typically used as an herb or garnish, but can also be eaten as a vegetable.

Cilantro or coriander has an edible flower. Consider using coriander flower in salads and as a garnish.

theanine

theanine

L-Theanine is an amino acid found naturally in green tea leaves.

L-theanine is an amino acid found in green tea leaves. Theanine stimulates the production of alpha brain waves, similar to the results of meditation, resulting in both deep relaxation and high mental focus. L-theanine causes the body to increase the production of serotonin and dopamine, making the person happier. Studies show that theanine makes it easier to focus when awake, as well as leading to sounder sleep.

nutritional information:

L-theanine is an amino acid found in [green tea leaves](#). Theanine stimulates the production of alpha brain waves, similar to the results of meditation, resulting in both deep relaxation and high mental focus. L-theanine causes the body to increase the production of serotonin and dopamine, making the person happier. Studies show that theanine makes it easier to focus when awake, as well as leading to sounder sleep.

Day 49: ground meat

ground meat

Ground meat is sacred to Neith. Honor and thank Neith for ground meat.

Cut back on ground meat.

Use extra lean meat.

Switch to ground turkey.

Switch to soy based substitutes for ground meat.

fatty acids

fatty acids

EPA & DHA which are present in fish body oils have the potential for improving the health of cardio-vascular system. Medical reports show that as the amount of EPA in the diet increases, the risk of coronary heart disease decreases. In a nutshell, EPA from fish oils lowers serum cholesterol & triglyceride levels, make your blood less viscous, thinner & less sticky, less prone to clump together. Diets of Eskimo and coastal Japanese are rich in the Omega 3 fatty acids, EPA & DHA. Their death rate from heart attacks is much lower when compared to the Western man. DHA is a major component of the brain and retina, and has a possible role in nerve transmission. Research has shown that many migraine sufferers have experienced some relief from consuming Fatty Acids.

—courtesy of [Austin Nutritional Research](#)

Day 50: mung bean sprouts

mung bean sprouts

Mung bean sprouts are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for mung bean sprouts.

Eat at least one serving of mung bean sprouts per month, taking in account the season and local availability.

Toss mung bean sprouts into salads. Stir-fry mung bean sprouts with other vegetables. Blend mung bean sprouts with vegetable juices. Mix mung bean sprouts with soft cheeses, tofu, yogurt, or kefir to make a dip. Stir mung bean sprouts into soups or stews when serving (after cooking). Combine mung bean sprouts in oat, barley, or buckwheat dishes. Sauté mung bean sprouts with onions. Puree mung bean sprouts with dried peas or beans. And, of course, eat them fresh and uncooked in a sprout salad.

The American Diabetes Association recommends bean sprouts as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Because mung bean sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

omega 3 fatty acids

alpha-linolenic acid (omega-3)

Alpha-linolenic acid is an omega-3 essential fatty acid that the human body can not produce in sufficient quantity. Therefore it must come from the diet.

Hemp seed oil is an excellent source of omega-3 fatty acids.

Wild salmon is very high in omega-3 fatty acids. Salmon normally eat krill, a source of astaxanthin (a natural carotenoid), the source of the rich red skin color.

Farm-raised salmon are fed grain and are low in omega-3 fatty acids. The color of thier skin is the result of dyes artificially added after death. Farm-raised salmon are nutritionally very poor. Avoid eating farm-raised salmon.

Day 51: cakes, pies, and sweets

cakes, pies, and sweets

Cut back on cakes, pies, and other sweets.

omega 6 fatty acids

linoleic acid (omega-6)

Linoleic acid is an omega-6 essential fatty acid that the human body can not produce in sufficient quantity. Therefore it must come from the diet.

Hemp seed oil is an excellent source of omega-6 fatty acids.

Day 52: flaxseed oil

flaxseed oil

Flaxseed oil is sacred to Bast and Aset (Isis). Honor and thank Bast and Aset for flaxseed oil.

Eat up to two (2) tablespoons of flaxseed oil a day. The total of hempseed oil and flaxseed oil and olive oil should not exceed two (2) to three (3) tablespoons a day.

The ancient Hellenism religion, created by Aristotle for Plotemy I by combining the Greek and Egyptian religions, taught that flaxseeds were useful for digestion and modern science confirms that flaxseeds help reduce cholesterol.

Flax seed oil is too fragile for cooking. The oil's delicate omega-3 essential fatty acids will oxidize under exposure to heat, air, or light. Use for salad dressings, drizzles on prepared foods, herbal/seasoned oil dips, and similar cold oil uses. Always store flax seed oil in an opaque container. Keep flax seed oil refrigerated to prevent rancidity.

Flaxseed oil is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

omega 9 fatty acids

omega 9 fatty acids

Omega-9 fatty acids are generally easy to find.

Day 53: junk food

junk food

Stop eating, or at least cut back on and avoid, junk foods.

Vitamin A

Vitamin A

Vitamin A is an essential micronutrient. Examples include retinol and four carotenoids, most famously beta carotene.

Carotenoids is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for carotenoids.

Eat carotenoids at least three to five times a week. You may eat carotenoids every day.

Recommended carotenoids include: beets, **carrots**, kale, lettuce, **seaweed**, **spinach**, squash, sweet potatoes, Swiss chard, and tomatoes.

Day 54: olive oil

olive oil

Olive oil is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for olive oil.

Eat one (1) to two (2) tablespoons of cold pressed extra virgin olive oil oil a day. The total of hempseed oil and flaxseed oil and olive oil should not exceed two (2) to three (3) tablespoons a day.

Choose cold pressed extra virgin olive oil for eating. Virgin olive oil may be used for cooking. Always store olive oil in an opaque container. Keep olive oil refrigerated to prevent rancidity.

Olive oil is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Vitamin B1

Vitamin B1

Vitamin B1 (thiamine) is an essential micronutrient.

Day 55:

flaxseeds

flaxseeds

Flaxseed is sacred to Bast, Aset (Isis), and Renenutet. Honor and thank Bast, Aset, and Renenutet for flaxseeds.

Eat at least one serving of freshly ground flaxseed per week, taking in account the season and local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

The ancient Hellenism religion, created by Aristotle for Plotemy I by combining the Greek and Egyptian religions, taught that flaxseeds were useful for digestion and modern science confirms that flaxseeds help reduce cholesterol.

Flaxseeds are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Flaxseeds are an important source of dietary fiber.

Vitamin C

Vitamin C

Vitamin C (ascorbic acid) is an essential micronutrient.

Day 56: oregano

oregano

Oregano is sacred to Bast. Honor and thank Bast for oregano.

Eat fresh oregano at least once per week. You may eat fresh oregano every day.

Oregano is typically used as a spice or herb.

Oregano goes well with bread, fish, potato, and pasta.

Vitamin D

Vitamin D

Vitamin D (calciferol, cholecalciferol) is an essential micronutrient.

Day 57: berries

berries

Berries are sacred to Bast. Honor and thank Bast for berries.

Eat berries at least three to five times a week. You may eat berries every day. Eat fruit at least three times a day.

Recommended berries include: blackberries, blueberries, boysenberries, cherries, cranberries, fresh currants, purple grapes, raspberries, and strawberries.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Berries are a good prebiotic.

Major groups discussed separately are citrus fruits, berries, high fiber fruits, melons, fleshy red fruits, and dried fruits. Mix up the categories from day to day and emphasize fruits that are currently in season, preferably from a local source.

The American Diabetic Association recommends berries as one of 10 “superfoods” for those with diabetes.

Blueberries should be emphasized when in season.

Cranberries should not be used often unless you need a strong diuretic.

Cherries should be used occasionally.

Vitamin B2

Vitamin B2

Vitamin B2 (riboflavin) is an essential micronutrient.

Day 58: ginger tea

Ginger tea is sacred to Bast. Honor and thank Bast for ginger tea.

Drink ginger tea at least once per week and as needed to help with digestion.

Drink ginger tea on days associated with Mercury and Mars.

vitamine

vitamine

Vitamin E (tocopherols, tocotrienols) is an essential micronutrient.

Day 59: citrus fruits

citrus fruits

Citrus fruits are sacred to Bast, Aset (Isis), Nwt and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for citrus fruits.

Eat citrus fruits at least three to five times a week. You may eat citrus fruits every day. Eat fruit at least three times a day.

Recommended citrus fruits include: kumquats, **lemons**, limes, **oranges**, pink grapefruit (also listed in red fleshy fruits), red grapefruit (also listed in red fleshy fruits), tangerines, and white grapefruit.

Major groups discussed separately are citrus fruits, berries, high fiber fruits, melons, fleshy red fruits, and dried fruits. Mix up the categories from day to day and emphasize fruits that are currently in season, preferably from a local source.

The American Diabetic Association recommends citrus fruit as one of 10 “superfoods” for those with diabetes.

Vitamin B12

Vitamin B12

Vitamin B12 (cobalmins, cyanocobalamin, hydroxycobalamin, methylcobalamin) is an essential micronutrient.

Day 60:

buttermilk

buttermilk

Buttermilk is sacred to Aset (Isis). Honor and thank Aset for buttermilk.

If you currently drink cow's milk, start switching to buttermilk. Buttermilk can be used as a substitute for whole cow's milk in recipes.

Vitamin K

Vitamin K

Vitamin K (phylloquinone, menaquinones) is an essential micronutrient.

Day 61: high fiber fruits

high fiber fruits

Fruits are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for high fiber fruits.

Eat high fiber fruits at least three to five times a week. You may eat high fiber fruits every day. Eat fruit at least three times a day.

Recommended high fiber fruits include: **apples**, peaches, and pears.

Major groups discussed separately are citrus fruits, berries, high fiber fruits, melons, fleshy red fruits, and dried fruits. Mix up the categories from day to day and emphasize fruits that are currently in season, preferably from a local source.

Vitamin B5

Vitamin B5

Vitamin B5 (pantothenic acid) is an essential micronutrient.

Day 62: chives

chives

Chives are sacred to Bast. Honor and thank Bast for chives.

Eat at least one serving of chives per month, taking in account the season and local availability.

A serving of chives (2 tablespoons, chopped) is an important part of prenatal diet care for pregnant women.

Chives are often treated as an herb or garnish. In the Goddess Diet Plan you can either serve chives as a vegetable or extensively use it as an herb, as long as you achieve the same quantity.

Chives are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Chives go well with fish and potato.

Vitamin B7

Vitamin B7

Vitamin B7 (biotin) is an essential micronutrient.

Day 63: melons

melons

Melons are sacred to Bast. Honor and thank Bast for melons.

Eat melons at least three to five times a week. You may eat melons every day. Eat fruit at least three times a day.

Recommended melons include: cantaloupe and watermelon.

Major groups discussed separately are citrus fruits, berries, high fiber fruits, melons, fleshy red fruits, and dried fruits. Mix up the categories from day to day and emphasize fruits that are currently in season, preferably from a local source.

According to Ayurveda, melons may be eaten occasionally during a diet reducing Vata, especially in the fall.

Vitamin B6

Vitamin B6

Vitamin B6 (pyridoxine, pyridoximine, pyridoxal) is an essential micronutrient.

Day 64: bread

bread

Bread is sacred to Aset (Isis) and Aset's husband Asar. Honor and thank Aset and Asar for bread.

Eat at least one serving of seed bread or sprouted bread per month, taking in account the season and local availability. Make sure all bread you eat has at least 3 grams of fiber per slice, sprouted grains, and no hydrogenated oils.

It is important to know that typical American white bread (and often breads labelled as multigrain or other healthy sounding nmes) is nto real bread. American white bread is filled with chemicals that gives it a shelf life of 7 to 14 days, while real bread becomes moldy in about two to four days.

Bread is associated with the Year of the Tiger.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

It is important for those who have diabetes, who are obese, or who have cancer to avoid bread made from processed flours and switch to bread made from whole grains.

Switch from whote processed bread to brown bread.

Switch from whole grain bread to seed or sprouted bread.

Bread is an acid-producing food (measured by the ash content resulting from laboratory titration).

French bread has a high glycemic index (greater than 100%). White bread has a high glycemic index (100%). Whole wheat bread has a high glycemic index (between 80% and 100%).

Spices that go well with breads include .anise, basil, caraway, cardamon, cinnamon, coriander, cumin, dill, garlic, lemon peel, orange peel, oregano, poppy seeds, rosemary, saffron, sage, and thyme.

Vitamin B3

Vitamin B3

Vitamin B3 (niacin, niacinamide) is an essential micronutrient.

Day 65: fleshy red fruits

fleshy red fruits

Fruits are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for fleshy red fruits.

Eat fleshy red fruits at least three to five times a week. You may eat fleshy red fruits every day. Eat fruit at least three times a day.

Recommended fleshy red fruits include: Japanese persimmons, pink grapefruit (also listed in citrus fruits), red grapefruit (also listed in citrus fruits), red-fleshed papaya, strawberry guava, **tomatoes**, and watermelon.

Major groups discussed separately are citrus fruits, berries, high fiber fruits, melons, fleshy red fruits, and dried fruits. Mix up the categories from day to day and emphasize fruits that are currently in season, preferably from a local source.

Vitamin B9

Vitamin B9

Vitamin B9 (folic acid, folinic acid) is an essential micronutrient.

Day 66: juicing

juicing

Juice is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for juices.

Drink vegetable or fruit juice at least once per day.

Some of the preferred juices are: açai berry juice, cranberry juice (when you are starting this diet), noni juice, and pomegranate juice. You should drink at least one of these juices at least once a week.

Juicing allows drinking fruits and vegetables. The fiber is destroyed in the juicing process. Live juice contains active enzymes for less than 30 minutes after juicing.

In addition to making your own juices, you need to start cleaning up all of the juices you drink.

All juices you drink should be organic (for your own juicing, only juice organic fruits and vegetables). All juices you drink should be unsweetened. All juices you drink should be fresh, preferably within 30 minutes of actual juicing.

sodium

sodium

Sodium is a mineral and an essential micronutrient.

Day 67: dried fruits

dried fruits

Fruits are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for dried fruits.

Eat dried fruits as often as needed. You may eat dried fruits every day. Eat fruit at least three times a day.

The dried fruit group should be used primarily for filling in gaps in your diet. When the fresh whole fruit is out of season the dried version can be used as a substitute. When you need a portable snack the dried version can be used as a substitute. Whenever possible, eat fresh whole fruits.

Recommended high fiber fruits include: dried apricots, dried blueberries, dried cherries, dried cranberries, dried currants, dates, figs, prunes, and raisins.

Dried fruits are recommended by the American Diabetes Association because they have a low or medium glycemic index (G.I.).

According to Ayurveda, most dried fruit should be avoided during a diet reducing Vata, especially in the fall.

potassium

potassium

Potassium is a mineral and an essential micronutrient.

Day 68:

rosemary

rosemary

Rosemary is sacred to Bast. Honor and thank Bast for rosemary.

Eat rosemary at least once per week. You may eat rosemary every day.

Rosemary is typically used as a spice or herb.

Rosemary goes well with bread, fish, and potato.

chlorine

chlorine

Chlorine is a mineral and an essential micronutrient.

Day 69: turkey

turkey

Turkey is sacred to Nwt and her husband Shu. Honor and thank Nwt and Shu for turkey.

Turkey is associated with the Year of the Dragon and the Year of the Tiger.

If you already eat mammals or birds, eat one serving of turkey per week, taking in account the season and local availability.

Eventually you will want to remove turkey completely from your diet, or no more than two special occasions per year.

If you don't currently eat meat, do not start eating meat.

Turkey is an acid-producing food (measured by the ash content resulting from laboratory titration).

calcium

calcium

Calcium is a nutritionally important mineral (an essential micronutrient) and a chemical element.

Coral calcium: Coral calcium is made from ground up dead coral reefs. Coral calcium has many trace minerals, which vary from batch to batch. The trace minerals slightly increase the amount of calcium absorbed by the human body. Large amounts of magnesium interfere with the absorption of calcium. Avoid coral calcium with lead.

nutritional information:

IMPORTANCE: Builds and maintains bones and teeth; regulates heart rhythm; eases insomnia; helps regulate the passage of nutrients in & out of the cell walls; assists in normal blood clotting; helps maintain proper nerve and muscle function; lowers blood pressure; important to normal kidney function and in current medical research reduces the incidence of colon cancer, and reduces blood cholesterol levels.

DEFICIENCY SYMPTOMS: May result in arm and leg muscles spasms, softening of bones, back and leg cramps, brittle bones, rickets, poor growth, osteoporosis (a deterioration of the bones), tooth decay, depression.

—courtesy of [Austin Nutritional Research](#)

Calcium is important for preventing anxiety, brittle nails, clumsiness, cramps, depression, dermatitis, gum disease, insomnia, irritability, joint pains, night sweats, numbness, osteoporosis, poor concentration poor growth, racing heart, rickets, tingling, tiredness, and tooth decay.

sources

Sources of calcium include: alfalfa, beans, broccoli, cabbage, carrots, hard water, lettuce,

molasses, nuts, parsley, parsnips, peas, seaweed, seeds, shellfish, soya beans, and spinach.

Additional sources of calcium (that should be avoided because they are animal products) include: cheese, milk, offal, and tinned fish.

Seniors should have 250-500 mg of calcium a day to help prevent bone loss, osteoporosis, and fractures.

calcium-rich foods

alfalfa
beans
broccoli
cabbage
canned fish (not recommended)
carrots
cayenne
cheese (not recommended)
clams
hard water
lettuce
milk (not recommended)
molasses
nuts
offal (not recommended)
parsley
parsnips

peas
seaweed
seeds
shellfish
soya beans
spinach
spirulina
tinned fish (not recommended)
zucchini

scientific information:

Calcium is a soft gray alkaline earth metal and is the fifth most abundant element in the Earth's crust.

Name: calcium

Symbol: Ca

Atomic Number: 20

Periodic Table: Group (or family) 2 (old European IUPAC system group IIA; old American CAS system group IIA), alkaline earth metals; Period 4; s-block

Atomic mass: 40.078(4) g/mol

Ayurvedic herbalism:

According to Dr. Ram of [The Healing Gardens](#), "CALCIUM: An essential nutrient that relaxes body & promotes sleep. Calcium deficiency causes restlessness & wakefulness."

Day 70: spinach

spinach

Spinach, a vegetable, is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for spinach.

Eat at least two servings of organic spinach per week, taking in account the season and local availability. You may eat spinach every day.

The American Diabetes Association recommends spinach as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Spinach is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Spinach has vitamin A and carotenes, essential nutrients in fighting cancer. Spinach has vitamin D, an essential nutrient in fighting cancer.

Reason to choose organic:

Spinach is the number eight (8) most important food to purchase organic because of the high level of chemical residues in non-organic spinach, according to the 2010 study by the [Environmental Working Group](#).

phosphorus

phosphorus

Phosphorus is a mineral and an essential micronutrient.

Day 71: allium vegetables

allium vegetables

Allium vegetables is sacred to Bast. Honor and thank Bast for allium vegetables.

Eat allium vegetables at least three to five times a week. You may eat allium vegetables every day. Those with cancer should eat allium vegetables every day.

Recommended allium vegetables include: **garlic**, leeks, onions, and shallots.

magnesium

magnesium

Magnesium is a mineral and an essential micronutrient.

Day 72: wheat

wheat

Wheat is sacred to Aset (Isis), Aset's husband Asar, Nepit's husband Neper, and Renenutet. Honor and thank Aset, Asar, Nepit, Neper, and Renenutet for wheat.

“There grows no wheat where there is no grain.” —Proverb of the Outer Temple of ancient Egypt

Optionally eat at least one serving of wheat per month, taking in account the season and local availability. This does not mean to eat a lot of wheat or wheat products. Most Americans need to cut back on wheat and wheat products.

Wheat is associated with the Year of the Dragon.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Persons with celiac disease (gluten-intolerant) should avoid wheat, rye, and barley.

Puffed wheat has a high glycemic index (greater than 100%).

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Whole wheat is a good prebiotic.

zínc

zinc

Zinc is a mineral and an essential micronutrient.

Day 73:

cruciferous

vegetables

cruciferous vegetables

Cruciferous vegetables are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for cricoferous vegetables.

Eat cruciferous vegetables at least three to five times a week. You may eat cruciferous vegetables every day.

Recommended cruciferous vegetables include: **baby bok choy**, bok choy, **broccoli**, Brussels sprouts, cabbage, cauliflower, and kale.

íron

iron

Iron is a nutritionally important mineral, an essential micronutrient, and a chemical element.

nutritional information:

IMPORTANCE: Its major function is to combine with protein and copper in making hemoglobin. Hemoglobin transports oxygen in the blood from the lungs to the tissues which need oxygen to maintain basic life functions. Iron builds up the quality of the blood and increases resistance to stress and disease. It is also necessary for the formation of myoglobin which is found only in muscle tissue. Myoglobin supplies oxygen to muscle cells for use in the chemical reaction that results in muscle contraction. Iron also prevent fatigue and promotes good skin tone.

DEFICIENCY SYMPTOMS: May result in weakness, paleness of skin, constipation, anemia.

—courtesy of [Austin Nutritional Research](#)

“Fortifying foods with iron does not significantly affect zinc absorption”, according to [the U.S. National Institutes of Health](#). “However, large amounts of iron in supplements (greater than 25 mg) may decrease zinc absorption, as can iron in solutions. Taking iron supplements between meals will help decrease its effect on zinc absorption.”

“Zinc toxicity has been seen in both acute and chronic forms”, according to [the U.S. National Institutes of Health](#). “Intakes of 150 to 450 mg of zinc per day have been associated with low copper status, altered iron function, reduced immune function, and reduced levels of high-density lipoproteins (the good cholesterol). One case report cited severe nausea and vomiting within 30 minutes after the erson ingested four grams of zinc gluconate (570 mg elemental zinc).”

Seniors should have less than 9 mg of iron a day, especially if postmenopausal or have heart disease.

Sources of iron include: beans, black pudding, broccoli, brown rice, cocoa, figs, lentils, lettuce, molasses, nuts, parsley, peanuts, peas, seaweed, shellfish, soy beans, sunflower seeds, wheatgerm, wholegrains, wholegrain rice, and wild rice.

Additional sources of iron (that should be avoided because they are animal products) include: meat, haggis, and offal.

Contrary to popular belief, spinach is actually *not* a good source of iron. See the article on [spinach](#) for details.

iron-rich foods

beans
beef (not recommended)
black pudding
broccoli
brown rice
cayenne
clams
cocoa
figs
haggis (not recommended)
lentils
lettuce
meat (not recommended)
molasses
nuts
offal (not recommended)

parsley
peas
peanuts
seaweed
shellfish
soya beans
sunflower seeds
wheatgerm
wholegrains
wholegrain rice
wild rice
yellow dock
zucchini

scientific information:

Iron is the tenth most abundant element in the universe and makes up about 5% of the Earth's crust.

Name: iron

Symbol: Fe

Atomic Number: 26

Periodic Table: Group (or family) 8 (old European IUPAC system group VIII; old American CAS system group VIII); Period 4; d-block

Atomic mass: 55.854(2) g/mol

Day 74: parsley

parsley

Parsley is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for parsley.

Eat at least one serving of parsley per week, taking in account the season and local availability.

While parsley is generally considered an herb or garnish (and you can continue to use it that way), in the Goddess Diet Plan you include parsley as a green leafy vegetable, such as in salads.

Parsley is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Parsley has vitamin D, an essential nutrient in fighting cancer.

Nobody in history has ever died of an overdose of parsley.

Parsley goes well with dried beans, corn, chicken eggs, fish, and potato.

manganese

manganese

Manganese is a mineral and an essential micronutrient.

Day 75: orange vegetables

orange vegetables

Vegetables are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for orange vegetables.

Eat orange vegetables at least three to five times a week. You may eat orange vegetables every day.

Recommended orange vegetables include: butternut squash, carrot, orange sweet bell pepper, **pumpkin**, sweet potato, and yam.

copper

copper

Copper is a nutritionally important mineral and an essential micronutrient and a chemical element.

nutritional information:

IMPORTANCE: Necessary for the absorption & utilization of Iron; helps oxidize Vitamin C and works with Vitamin C to form Elastin, a chief component of the Elastin muscle fibers throughout the body; aids in the formation of red blood cells; helps proper bone formation & maintenance.

DEFICIENCY SYMPTOMS: May result in general weakness, impaired respiration, skin sores.

—courtesy of [Austin Nutritional Research](#)

“Zinc toxicity has been seen in both acute and chronic forms”, according to [the U.S. National Institutes of Health](#). “Intakes of 150 to 450 mg of zinc per day have been associated with low copper status, altered iron function, reduced immune function, and reduced levels of high-density lipoproteins (the good cholesterol). One case report cited severe nausea and vomiting within 30 minutes after the person ingested four grams of zinc gluconate (570 mg elemental zinc).”

sources:

Sources of copper include: avocado, beans, broccoli, cabbage, chocolate, fish, garlic, lentils, lettuce, mushrooms, nuts, parsley, peas, seaweed, spinach, and zucchini.

copper-rich foods

avocado

beans
broccoli
cabbage
chocolate
fish
garlic
lentils
lettuce
mushrooms
nuts
parsley
peas
seaweed
spinach
zucchini

scientific information:

Copper is a ductile metal with excellent electrical conductivity.

Name: copper

Symbol: Cu

Atomic Number: 29

Periodic Table: Group (or family) 11 (old European IUPAC system group IB; old American CAS system group IB), coinage metals; Period 4; d-block

Atomic mass: 63.546(3) g/mol

Copper is antimicrobial, meaning that bacteria, vruses, and fungi are killed by coming into contact with copper. The ancient Egyptians used copper water pipes to clean their water supply.

Day 76: sprouts

sprouts

Sprouts is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for sprouts.

Eat sprouts at least three to five times a week. You may eat sprouts every day.

Because sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

See individual sections on specific sprouts for more information. Use with additional sprouts that aren't specifically listed.

iodine

iodine

Iodine is a chemical element, a nutritionally important mineral, and an essential micronutrient.

nutritional information:

IMPORTANCE: Aids in the development and functioning of the thyroid gland; regulates the body’s production of energy; helps burn excess fat by stimulating the rate of metabolism; mentality, speech, the condition of the hair, skin, & teeth are dependent upon a well-functioning thyroid gland.

DEFICIENCY SYMPTOMS: May result in an enlarged thyroid gland, slow mental reaction, dry skin & hair, weight gain, loss of physical & mental vigor.

—courtesy of [Austin Nutritional Research](#)

sources:

Sources of iodine include: fish, grapes, iodized salt, lettuce, peanuts, peppers, pineapple, shellfish, spinach, and whole grains.

Additional sources of iodine (that should be avoided because they are animal products) include: cheese, eggs, meat, milk, and offal.

iodine-rich foods

beef (not recommended)
bell peppers
cheese (not recommended)

chicken eggs (not recommended)
clams
eggs (not recommended)
fish
grapes
iodized salt
lettuce
meat (not recommended)
milk (not recommended)
offal (not recommended)
peanuts
peppers
pineapple
shellfish
spinach
whole grains

scientific information:

Iodine is the least reactive of the halogens.

Name: iodine

Symbol: I

Atomic Number: 53

Periodic Table: Group (or family) 17 (old European IUPAC system group VIIB; old

American CAS system group VIIA), halogens; Period 5; p-block

Atomic mass: 126.90447(3) g/mol

Day 77: honey

honey

Honey is sacred to Bast and Bes. Honor and thank Bast and Bes for honey.

Eat honey at least one to five times a week. If you don't have diabetes or pre-diabetes, you may eat honey every day.

Use local organic honey as a sweetener. You may use unsulfured organic cane sugar, black strap molasses, local organic honey, pure maple syrup, and stevia as your regular daily sweeteners.

Honey is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

selenium

selenium

Selenium is a mineral and an essential micronutrient.

Day 78:

spearmint

spearmint

Spearmint is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for spearmint.

Eat at least one serving of fresh spearmint per week, taking in account the season and local availability. You may eat spearmint every day.

Mint goes well with fruit.

tabouli

tabouli

Tabouli is a traditional Middle Eastern vegetable dish based on bulghar wheat, mint, cucumber, and olive oil.

nutritional information:

No cholesterol.

High in dietary fiber and manganese.

Very high in vitamin A and vitamin C.

Excellent source of protein (essential amino acids), especially in quinoa version or with added hemp seed meal.

Excellent source of essential fatty acids.

Eat tabouli at every lunation (Full Moon, New Moon, and Quarter Moons) and major Goddess holy days throughout the summer. Optional any day in the summer.

cookware:

- Cooking pot with cover
- Sauce pan with cover
- Large or medium mixing bowl(s)
- Glass jar [optional]
- Wooden mixing spoon
- Sharp cutting knife

ingredients:

There is quite a bit of flexibility in both choice of ingredients and in quantites (proportions) of ingredients.

Please read through recipe instructions and notes before choosing quantities of ingredients.

- 1/2 to 2 cups of dry bulghar wheat (also called cracked wheat or burghur wheat)
- optional: 1/2 to 2 cups whole grain quinoa (not a traditional ingredient)
- optional: 1/2 to 1 cup hemp seed meal (not a traditional ingredient)
- optional: 1 cup of cooked and drained garbanzo beans (also called chick peas) or lentils (neither is a traditional ingredient)
- boiling water: twice as many cups of water as quinoa, equal number of cups of water as bulghar
- 1 cucumber: peeled and seeded, then diced or finely chopped
- 1 to 4 tomatoes: firm, chopped or diced (left out of some traditional recipes)
- 2 tablespoons to 1 cup fresh mint (typically 1/2 to 1 cup): chopped
- optional substitute: lemon balm for some or all of the mint
- 1 to 2 cups or 1 to 3 bunches fresh flat leaf parsley: finely chopped
- optional: 1/2 to 1 tablespoon fresh basil
- optional: 1 bunch coriander (also called cilantro): chopped
- optional: 2-3 bunches green onions or scallions: sliced (both white and green parts); this is a common traditional addition to the recipe
- optional: 1 to 3 cloves garlic: minced (note reduce or eliminate green onion when adding garlic)
- optional: 1 red onion: chopped (spicier substitute for green onions); somewhat changes the character of the taste
- optional: 2-3 carrots: grated finely (drastically changes character of flavor, but adds nutrition)
- optional: 1 red chili: finely chopped (spicier version); drastically changes the character of the taste
- 1/2 cup fresh squeezed lemon juice
- 1/4 to 3/4 cups cold pressed extra virgin olive oil
- 1 to 2 tablespoons hemp seed oil per person eating tabouli
- optional: 1 tablespoon flax seed oil per person eating tabouli
- optional: 1 tablespoon freshly ground black pepper (most recipes call for pepper to taste)
- optional: 1/2 teaspoon raw sea salt (most recipes call for ordinary salt to taste)
- optional: 1/2 teaspoon cayenne pepper
- optional: 1/2 teaspoon ground cumin
- optional: 1/2 orange, zest and juice (reduce lemon juice by half); drastically changes the character of the taste
- optional: pistachios, finely chopped
- Romaine lettuce

preparation:

Traditional tabouli is made with bulghar wheat. The quinoa version is popular in health food circles (unlike bulghar wheat, quinoa is a complete protein). The lentil and garbanzo bean version makes a composite protein. The hemp seed meal is also a complete protein. A recommended

version has equal portions bulghar wheat and quinoa with half portion of hemp seed meal.

Cooking bulghur wheat: Put bulghur wheat in a bowl. Boil the water in a pot. Pour the boiling water over the bulghur wheat. Let the bulghur wheat soak in the hot water for 30 minutes to 2 hours. The wheat should absorb all of the water. If not, drain off the excess with a colander. The bulghur wheat should be light and fluffy.

Cooking quinoa: Thoroughly soak the quinoa in cold water for five minutes using medium size bowl. Drain and rinse under cold running water. Note that you can purchase pre-rinsed quinoa. Pour rinsed quinoa into a sauce pan. Lightly toast the quinoa in 1/2 to 2 tablespoons olive oil (this is in addition to the amount used as part of the dressing). Add water and bring to a full boil. Cover with a tight fitting lid and reduce heat to a low simmer. Cook for about 15 to 20 minutes (until water is absorbed). Optionally drain excess water and save to add back to finished mixture if needed to make a nice tabouli consistency. Let quinoa cool before mixing with other ingredients.

Prepare dressing: Mix lemon juice, olive oil, hemp seed oil, flax seed oil (if used), garlic (if used), black pepper (if used), sea salt (if used), cayenne pepper (if used), orange zest and juice (if used), and cumin (if used) in a bowl or glass container. Let dressing sit

Preparing salad: Chop the mint, parsley, cucumber and tomatoes. Also chop any optional ingredients used, such as lemon balm, basil, green onions, scallions, red onion, carrot, and/or red chili. Optionally use a blender or food processor to mince parsley. Mix salad parts in bowl.

Optionally mix the sea salt and freshly ground black pepper with the chopped green onions or scallions first. This lets the salt and pepper bring out the sweetness of the onion juice. In this case, mix mint, parsley, and basil, then tomatoes, cucumber and other optional vegetables, finally mixing in the green onion mixture.

Combine all of the bulghur wheat, quinoa, hemp seed meal with the vegetable ingredients in a mixing bowl. Combine well.

Thoroughly mix in the dressing.

Put the mixing bowl in the refrigerator for at least one hour. A full night is even better.

Serve cold or at room temperature.

Place the tabouli salad on a bed of Romaine lettuce or use hearts of Romaine lettuce to scoop up the tabouli salad.

Optionally sprinkle with chopped pistachios. In the spicier version, serve with a spoonful of yoghurt and sprinkle with pistachios.

lamb

Day 79: lamb

Lamb is sacred to Neith. Honor and thank Neith for lamb.

If you already eat mammals, eat one serving of lamb per month, taking in account the season and local availability.

If you don't currently eat meat, do not start eating meat.

Lamb is an acid-producing food (measured by the ash content resulting from laboratory titration).

molybdenum

molybdenum

Molybdenum is a mineral and an essential micronutrient.

Day 80: quinoa

quinoa

Quinoa, a pseudo-grain, is sacred to Bast and Renenutet. Honor and thank Bast and Renenutet for quinoa.

Eat at least one serving of quinoa per month, taking in account the season and local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Quinoa is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

silver

silver

Silver is a mineral and an essential micronutrient.

Day 81: pumpkin

pumpkin

Pumpkin, a squash, is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for pumpkin.

Eat at least two servings of pumpkin per week, taking in account the season and local availability. You may eat pumpkin every day. Choose unsweetened organic pumpkin. When fresh pumpkin is out of season, eat canned organic unsweetened pumpkin.

The American Diabetes Association recommends pumpkin as a starchy vegetable.

Pumpkin is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

The crop for canned pumpkin (grown mostly in Ohio) was ruined by rain in both 2008 and 2009. As a result there was a nationwide shortage of canned pumpkin in 2010.

sulphur

sulphur

Sulphur is a mineral and an essential micronutrient.

Day 82: thyme

thyme

Thyme is sacred to Bast. Honor and thank Bast for thyme.

Eat fresh thyme at least once per week. You may eat fresh thyme every day.

Thyme is typically used as a spice or herb.

Thyme goes well with dried beans, bread, corn, chicken eggs, fish, and potato.

cobalt

cobalt

Cobalt is a mineral and an essential micronutrient.



Day 83: apple

apple

Apple, a fruit, is sacred to Bast, Aset (Isis), Bes, Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Bes, Nwt, and Het Heret for apples.

Eat at least one organic apple per week, taking in account the season and local availability. You may eat an apple a day. Do not eat more than four apples in one day or more than two apples per day on a regular basis.

Goddesses associated with the apple include Aphrodite (Greek/Hellenism), Aset (Kemetic), Athena (Greek/Hellenism), Bast (Kemetic), Hathor (kemetic), Het Heret (Kemetic), Induna (Norse/Germanic), Isis (Kemetic), Ithun (Norse/Teutonic), Nwt (kemetic), Pomona (Roman), Venus (Roman). Apple is also associated with Apollo (Greek/Hellenism), Bes (Kemetic), Odin (Norse), Woden (Anglo-Saxon), and Zeus (Greek/hellenism).



Pomona, shown in the 1700 painting by Nicolas Fouché, is the Roman Goddess or nymph of orchards and the trees of the orchard.

Epona, the Celtic Goddess of horses, was later adopted as a Roman Goddess. Outside of Gaul, Epona was often depicted in the Imperial pose, holding apples, carrots, and oats in her lap.

Ritual uses of apples: Bury an apple in the garden on Samhain as food for departed spirits.

Apples and applesauce are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

According to Ayurveda, cooked apples are a good food for reducing Vata, especially in the fall. According to Ayurveda, raw uncooked apples may be eaten occasionally during a diet reducing Vata, especially in the fall.

Apples contain high amounts of the fiber pectin. Pectin helps prevent constipation, a leading cause of headaches.

Apples are a great source of the fiber pectin. One apple has five grams of fiber. [University of Illinois](#)

Eating apples on a regular basis helps lower LDL (low density lipoprotein) cholesterol by up to 16%.

Reason to choose organic:

Apples are the number four (4) most important food to purchase organic because of the high level of chemical residues in non-organic apples, according to the 2010 study by the [Environmental Working Group](#).

botanical information:

Botanical name: *Malus domestica* , *Malus sylvestris*, or *Pyrus* spp. (especially *Pyrus malus*)

Common name: apple

Family: Rosaceae (rose)

Height: 3-12 meters or 10-40 feet

origin:

Origin: central Asia

history:

History: Christmas ornaments are derived from an early Christian practice of hanging apples on the Yule tree to convert the use of a tree at Yule from a Germanic Pagan practice into a Christian practice. The apples were from the Jewish Garden of Eden myth.

In 1900, there were more than 7,000 different varieties of apple grown in the U.S. By 2000, 86.2 percent of those varieties were extinct and only two varieties of apples accounted for more than half of the U.S. apple crop.

nutritional information:

Apples are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Apples help keep the liver clean and healthy.

The large quantity of pectin in apples makes them an excellent source of dietary fibre.

Apples are a food that increases sexual energy and enhances fertility.

“Oh, my fellow men, do not defile your bodies with sinful foods. We have corn, we have **apples** bending down the branches with their weight, and grapes swelling on the vines. There are sweet-flavored herbs, and vegetables which can be cooked and softened over the fire, nor are you denied milk or thyme-scented honey. The earth affords a lavish supply of riches, of innocent foods, and offers you banquets that involve no bloodshed or slaughter; only beasts satisfy their hunger with flesh, and not even all of those, because horses, cattle, and sheep live on grass.”, Pythagoras (Greek mathematician).

Apples and applesauce are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Ayurvedic herbalism:

According to Ayurveda, cooked apples are a good food for reducing Vata, especially in the fall. According to Ayurveda, war uncooked apples may be eaten occassionally during a diet reducing Vata, especially in the fall.

Chinese herbalism:

Chinese gender: yin (cool)

Chinese flavor: sweetand slightly sour

selection:

Reason to choose organic:

Apples are the number four (4) most important food to purchase organic because of the high level of chemical residues in non-organic apples, according to the 2010 study by the [Environmental Working Group](#).

Reason to choose organic:

Apples have the number two (2) highest pesticide load of 45 common fruits and vegetables studied in 2006 by the [Environmental Working Group](#) and is therefore a prime candidate for switching to organic. The EWA explains, “While washing and rinsing fresh produce may reduce levels of some pesticides, it does not eliminate them. Peeling also reduces exposures, but valuable nutrients often go down the drain with the peel. The best option is to eat a varied diet, wash all produce, and choose organic when possible to reduce exposure to potentially harmful chemicals.”

According to USDA and FDA tests on commercially grown foods collected between 2000 and 2005, apple has a 93.6% (percentage) of samples tested with detectable pesticides, a 82.3 (percentage) of samples with two or more pesticides, a 2.8 average number of pesticides found in a sample, an average of 0.894 parts per million of all pesticides found, and 50 different pesticides found in use growing apples. These toxic pesticides don't apply to organic foods.

storage:

Storage: Apples can be safely stored for more than a week.

preparation:

Juicing: Apple juice has the highest amounts of polyphenols in the fruits studied by Cornell University in 2008. Polyphenols help prevent damage to brain cells, helping prevent mental decline.

ancient myths and beliefs:

from “The Handbook of Norse Mythology”:

by Karl Mortensen, 1898 (“Nordisk mytologi”), original Danish
translated into English 1913 by A. Clinton Crowell

10. BRAGI is god of the scaldic art, and he is married to ITHUN, who guards the apples which the gods eat when they grow old. Afterwards they grow young again, and so it will continue until Ragnarok.

deities associated with apple:

- Aphrodite (Greek Goddess)
- Apollo (Greek God)
- Athena (Greek Goddess)
- Bes (Egyptian God)
- Hera (Greek Goddess)
- Induna (Norse Goddess)
- Ithun (Norse Goddess)
- Odin (Norse God)
- Venus (Roman Goddess)
- Woden (Anglo-Saxon God)
- Zeus (Greek God)

nickel

nickel

Nickel is a mineral and an essential micronutrient.

Day 84: sweet potato

sweet potato

Sweet potato is sacred to Bast. Honor and thank Bast for sweet potatoes.

Eat at least one serving of sweet potato per month, taking in account the season and local availability.

Sweet potato is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

The American Diabetic Association recommends sweet potatoes as one of 10 “superfoods” for those with diabetes.

boron

boron

Boron is a mineral and an essential micronutrient.

Day 85: butter and ghee

butter and ghee

Butter and ghee are sacred to Aset (Isis). Honor and thank Aset for butter and ghee.

Cut back or eliminate dairy products from your diet.

While you are still eating dairy foods, switch from margarine to real organic unsalted butter.

While you are still eating dairy foods, you can use ghee in cooked foods.

strontium

strontium

Strontium is a mineral and an essential micronutrient.

Day 86: tomato

tomato

Tomato, a fruit, is sacred to Bast. Honor and thank Bast for tomato.

Eat at least one serving of tomatoes per week, taking in account the season and local availability. You may eat tomato every day.

The U.S. Supreme Court ruled in the 1893 case *Nix v. Hedden*, 149 U.S. 304 (1893) that tomato was a vegetable rather than a fruit. This is blatantly false and reflects a Christian anti-science bias. Tomato is clearly and unambiguously a fruit. Any botanist can confirm this. But American judges do not believe in science, because science clearly disproves the existence of the Christian god.

Tomato is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

The American Diabetic Association recommends tomatoes as one of 10 “superfoods” for those with diabetes. The American Diabetes Association recommends tomato as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Basil goes well with tomatoes.

silicon

silicon

Silicon is a mineral and an essential micronutrient.

Day 87: orange

orange

Orange, a citrus fruit, is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for oranges.

Eat at least two servings of oranges per week, taking in account the season and local availability. You may eat oranges every day.

Eat orange on days associated with the Sun (Sonne).

Oranges are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Oranges are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

According to Ayurveda, oranges are an excellent food for reducing Vata, especially in the fall.

Orange peel goes well with bread.

dietary clay

dietary clay

There is controversy over the use of dietary clay, but research does show that there are dietary clays that are healthy and may even help with some ailments.

Day 88: ginger

ginger

Ginger has been used for thousands of years to relieve inflammation, nausea, and digestive problems, as well as improve immunity to disease and improve blood circulation.

Ginger is sacred to Bast and Seth. Honor and thank Bast and Seth for ginger.

Eat at least one serving of ginger per week, taking in account the season and local availability. You may eat ginger every day.

Eat ginger on days associated with Mercury and Mars.

Ginger is usually used as an herb or spice.

Ginger is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Pickled ginger is a good source of probiotics.

Ginger goes well with fish and fruit.

chromium

chromium

Chromium is a nutritionally important mineral and a chemical element.

nutritional information:

IMPORTANCE: Works with insulin in the metabolism of sugar and stabilizes blood sugar levels; cleans the arteries by reducing Cholesterol & Triglyceride levels; helps transport amino acids to where the body needs them; helps control the appetite; medical research has shown that persons with low levels of Chromium in their bodies are more susceptible to having cancer and heart problems and becoming diabetic.

DEFICIENCY SYMPTOMS: May result in glucose intolerance in diabetics; arteriosclerosis, heart disease, depressed growth, obesity, tiredness.

—courtesy of [Austin Nutritional Research](#)

Seniors should have at least 120 mcg of chormium a day for proper blood sugar and insulin function.

Sources of chromium include: black pepper, wheatgerm, and whole grain cereals.

Additional sources of chromium (that should be avoided because they are animal products) include: cheese and offal.

chromium-rich foods

black pepper
cheese

(not recommended)

offal

(not recommended)

wheatgerm

whole grains

scientific information:

Chromium is a steel-gray, lustrous, hard metal.

Name: chromium

Symbol: Cr

Atomic Number: 24

Periodic Table: Group (or family) 6 (old European IUPAC system group VIA; old American CAS system group VIB); Period 4; d-block

Atomic mass: 51.9961(6) g/mol

Day 89: cold water fish

cold water fish

Fish are sacred to Aset (Isis). Honor and thank Aset for cold water fish.

If you already eat mammals, birds, or fish, eat one serving of cold water fish per month, taking in account the season and local availability.

If you don't currently eat meat, do not start eating meat.

Cold water fish are an acid-producing food (measured by the ash content resulting from laboratory titration).

The American Diabetic Association recommends fish high in omega-3 fatty acids as one of 10 “superfoods” for those with diabetes.

Cold-water fish have vitamin D, an essential nutrient in fighting cancer.

Basil goes well with fish and shellfish. Spices that go well with fish include .anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 90:

fermented foods

fermented foods

Fermented foods are sacred to Bast. Honor and thank Bast for fermented foods.

Eat at least one serving of fermented foods at least once a week.

Fermented foods are a good source of probiotics.

Day 91: bok choy

bok choy

Bok Choy, a vegetable, is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for bok choy.

Eat at least one serving of bok choy per week, taking in account the season and local availability.

Bok choy is a [cruciferous vegetable](#).

The American Diabetes Association recommends bok choy as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Bok choy is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Bok choy has vitamin D, an essential nutrient in fighting cancer.

Day 92: pickled foods

pickled foods

Pickled foods are sacred to Bast. Honor and thank Bast for pickled foods.

Eat at least one serving of pickled foods at least once a week.

Cleopatra's favorite diet food was pickles.

Pickled ginger and pickles (brine-cured, without vinegar) are a good source of probiotics.

Day 93: alfalfa sprouts

alfalfa sprouts

Alfalfa sprouts sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for alfalfa sprouts.

Eat at least one serving of alfalfa sprouts per month, taking in account the season and local availability. Alfalfa is normally eaten as sprouted seeds (alfalfa sprouts). You can sprout alfalfa at home.

Toss alfalfa sprouts into salads. Alfalfa sprouts can be used in wraps and roll-ups. Stir-fry alfalfa sprouts with other vegetables. Place alfalfa sprouts on top of omelets or scrambled eggs. And, of course, eat them fresh and uncooked in a sprout salad.

The American Diabetes Association recommends sprouts as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Because alfalfa sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

botanical information:

Botanical name: *Medicago sativa*

Common name: alfalfa (United States), Chilean clover, Kuthirai Masal (Tamil), lucerne (United Kingdom), Lucerne grass (India), purple medic

Family: Fabaceae

Height: 1 meter (3 feet)

history:

History: Alfalfa has been used as an herbal medicine for at least 1,500 years.

nutritional information:

nutritional value per 1 cup alfalfa sprouts:

- **Calories:** 40 calories
- **Proteins:** 1 grams
- **Fat:** trace
- **Cholesterol:** 0 milligrams
- **Carbohydrates:** 1 gram
- **Fiber:** 1 gram
- **Sodium:** 2 milligrams

nutritional value per 1 tablespoon (tbsp) alfalfa sprouts:

- **Calories:** 1 calories
- **Proteins:** trace
- **Fat:** trace
- **Cholesterol:** 0 milligrams
- **Carbohydrates:** trace
- **Fiber:** trace
- **Sodium:** 0 milligrams

Alfalfa sprouts are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

The parts of the alfalfa plant that are used are its leaves. In the Middle East, alfalfa is known as the “father of all herbs.” Alfalfa is one of the most nutritious plants on earth and its leaves are rich in calcium, magnesium, potassium, beta-carotene, vitamins A, B-12, C, D, E and K. Alfalfa has also been found to contain all eight essential amino acids. It even contains fluoride which can help prevent tooth decay. Alfalfa is one of the highest fibrous herbs in existence and we are unable to digest its raw leaves. For centuries, Native Americans ground its seeds to be used as flour or boiled its leaves and ate them like greens.

—courtesy of [Austin Nutritional Research](#)

Chinese herbalism:

Chinese gender: yin (cool)

Young alfalfa leaves were used to treat disorders of the digestive tract and the kidneys in early traditional Chinese medicines.

Ayurvedic herbalism:

Ayurvedic Doshas: PK- V+ Pitta decreases; Kapha decreases; Vata increases.

Part Used: herb (above ground parts of plant)

Taste: astringent, sweet

Energy: cooling

Vipaka: (Post-Digestive Effect) pungent

Tissues: plasma, blood

Systems: circulatory, urinary

Actions: alterative, diuretic, antipyretic, hemostatic

Indications: ulcers, edema, arthritis, vitamin deficiency, mineral deficiency

Precautions: high *Vata*

Preparation: infusion, powder (250 mg to 1 g)

Alfalfa leaves are used in Ayurvedic medicine to treat poor digestion. Alfalfa seeds

Alfalfa seeds are used to make a cooling poultice to treat boils.

herbal healing:

In homeopathic medicine, alfalfa is used to treat anemia, diabetes, indigestion, and bladder disorders, as well as to increase appetite (contributing to weight gain), as a diuretic (to increase urination), as an estrogen replacement (to increase breast milk and mitigate premenstrual syndrome), as a dietary supplement, and to lower blood cholesterol levels.

planting and growing:

Planting: Alfalfa will completely take over any garden it is planted in. If you decide to plant alfalfa, plant it in a separate location and be very vigilant to remove any alfalfa (including the complete roots) that starts growing in your regular garden.

Planting: You can grow alfalfa sprouts in a large glass jar. Sprouts do not need sunlight to grow, and therefore can be grown in any room in the house.

Day 94: salmon

salmon

Salmon is sacred to Aset (Isis). Honor and thank Aset for herring.

Eat at least one serving of wild Alaskan salmon (especially sockeye) per week, taking in account the season and local availability. You may eat salmon almost every day.

Salmon should be wild caught, never farm raised.

You can replace fresh salmon with canned wild salmon up to half of the times you have salmon. King, sockeye, and coho salmon from Alaska are all acceptable canned choices.

Wild salmon is very high in omega-3 fatty acids. Salmon normally eat krill, a source of astaxanthin (a natural carotenoid), the source of the rich red skin color.

Farm-raised salmon are fed grain and are low in omega-3 fatty acids. The color of thier skin is the result of dyes artificially added after death. Farm-raised salmon are nutritionally very poor. Avoid eating farm-raised salmon.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include .anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 95: sesame

sesame and sesame seed

Sesame is sacred to Bast. Honor and thank Bast for sesame.

Eat at least one serving of sesame per week, taking in account the season and local availability. In addition to eating sesame seeds, also eat sesame butter and tahini.

Tahini is a paste made from sesame seeds.

A serving of tahini (about two tablespoons) is an important part of prenatal diet care for pregnant women.

Day 96: avocado

avocado

Avocado is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for avocados.

Eat at least one serving of avocado per month, taking in account the season and local availability.

botanical information:

Botanical name: *Persea americana*, aslo known as *Persea gratissima*

Common name: alligator pear, avocado, butter pear

French name: avocat

Family: Lauraceae

origin:

Origin: Mexico, Central America, South America, and the Caribbean.

nutritional information:

Avocados are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Avocados are a source of copper.

nutritional value per 100 grams:

- **Calories:** 161 calories
- **Fat:** 15 grams
- **Proteins:** 2 grams
- **Lipids:** 20 grams

- **Carbohydrates:** 7 grams
- high in Vitamin A
- high in Vitamin B
- high in Vitamin C
- high in Vitamin E
- high in Vitamin PP
- 17 minerals

Biotin: Avocados are a good source of biotin. Biotin helps keep skin, nails, and hair healthy. Other good sources of biotin include: chicken eggs, legumes, nuts, and soy beans.

Avocados are a food that increases sexual energy and enhances fertility.

selection:

Avocado has the number two (2) lowest pesticide load of 45 common fruits and vegetables studied in 2006 by the [Environmental Working Group](#) and is therefore a food that can be purchased conventionally-grown when organic isn't available. The EWA explains, "While washing and rinsing fresh produce may reduce levels of some pesticides, it does not eliminate them. Peeling also reduces exposures, but valuable nutrients often go down the drain with the peel. The best option is to eat a varied diet, wash all produce, and choose organic when possible to reduce exposure to potentially harmful chemicals."

According to USDA and FDA tests on commercially grown foods collected between 2000 and 2005, avocado has a 1.4% (percentage) of samples tested with detectable pesticides, a 0.0% (percentage) of samples with two or more pesticides, an 0.0 average number of pesticides found in a sample, an average of 0.001 parts per million of all pesticides found, and 2 different pesticides found in use growing avocado. These toxic pesticides don't apply to organic foods.

storage:

Storage: Eat avocado within two days of purchase.

external care:

Skin care: Avocados contain biotin. Biotin is an essential vitamin for fat and carbohydrate metabolism. A deficiency in biotin can lead to dry skin and brittle hair and nails.

Day 97:

cantaloupe

melon

cantaloupe melon

Cantaloupe is sacred to Bast. Honor and thank Bast for cantaloupe melons.

Eat at least one serving of organic cantaloupe per month, taking in account the season and local availability.

Cantaloupe melon an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Cantaloupe is recommended by the American Diabetes Association because it has a medium glycemic index (medium G.I.).

According to Ayurveda, melons may be eaten occasionally during a diet reducing Vata, especially in the fall.

Day 98: pasta

pasta

Pasta is sacred to Bast, Aset, and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for pasta.

Eat at least one serving of pasta two to three times a week. Pasta should be cooked al dente. use organic whole grain pasta, rice noodles, bean thread noodles, mixture of whole wheat and buckwheat noodles, and soba.

Basil goes well with pasta.

Day 99:

grapefruit

grapefruit

Grapefruit is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for grapefruits.

Eat at least two servings of grapefruit per month, taking in account the season and local availability. Eat both white and pink grapefruit.

Eat grapefruit on days associated with Jupiter.

Grapefruit is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Grapefruit is recommended by the American Diabetes Association because it has a low glycemic index (low G.I.).

According to Ayurveda, grapefruit is an excellent food for reducing Vata, especially in the fall.

Day 100: green beans

green beans

Green beans are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for green beans.

Eat at least one serving of organic green beans per month, taking in account the season and local availability.

The American Diabetes Association recommends green beans as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Green beans are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 101: cloves

Cloves are sacred to Bast. Honor and thank Bast for clove.

Cloves are associated with the Year of the Monkey.

Eat ground cloves at least once per week. You may eat clove every day.

Ground cloves are typically used as a spice or herb.

Cloves go well with fruit.

Day 102: chicken eggs

Remember to always immediately wash your hands after touching raw chicken or eggs. Before touching anything else. To prevent cross-contamination.

Chicken eggs are sacred to Nwt and her husband Shu. Honor and thank Nwt and Shu for chicken eggs.

If you already eat mammals or birds, eat one serving of cage free organic chicken eggs per month, taking in account the season and local availability. If you are already eatign chicken eggs, you may eat cage free organic chicken egss daily, then slowly cut back to once a week, then to once per month, with the eventual goal of completely eliminating them from your diet.

Chicken eggs are associated with the Year of the Dragon and the Year of the Tiger.

To avoid a breakfast rut, consider adding chopped vegetables (especially bok choy) or grated zucchini to your eggs.

Chicken eggs is an acid-producing food (measured by the ash content resulting from laboratory titration).

The American Diabetes Association recommends chicken eggs as a protein source.

Spices that go well with chicken eggs include .basil, chervil, paprika, parsley, pepper, sage, tarragon, and thyme.

Day 103: wheat germ

Wheat germ is sacred to Bast, Aset (Isis), Aset's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for wheat germ.

Eat at least one serving of wheat germ at least once a week, taking in account the season and local availability, unless you have problems with gluten.

Wheat is associated with the Year of the Dragon.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Day 104: lemon

Lemon is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for lemons.

Eat at least one serving of lemon per week, taking in account the season and local availability.

Eat lemon on days associated with the Sun (Sonne).

Lemon is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

According to Ayurveda, lemons are an excellent food for reducing Vata, especially in the fall.

Lemon peel goes well with bread and fish.

Day 105: lime

Lime is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for limjes.

Eat at least one serving of limes per month, taking in account the season and local availability.

Eat lime on days associated with the Sun (Sonne).

Lime is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

According to Ayurveda, limes are an excellent food for reducing Vata, especially in the fall.

Day 106: nut butters

Nut butters are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for nut butters.

Eat nut butters at least once per month. You may eat nut butters several times a week.

Make sure that the nut butters you obtain do not have any added hydrogenated oils. You can make your own nut butters.

Day 107: stevia

Stevia is sacred to Bast. Honor and thank Bast for stevia.

Use stevia as a sweetener. You may use unsulfured organic cane sugar, black strap molasses, local organic honey, pure maple syrup, and stevia as your regular daily sweeteners.

Stevia is typically used as a sweetener.

Day 108: almonds

Almonds, a nut, are sacred to Bast, Aset (Isis), Het Heret (Hathor), Nwt, Satis, Seshat (Sothis), and Anket. Honor and thank Bast, Aset, Het Heret, Nwt, Satis, Seshat, and Anket for almonds.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of almonds per week, taking in account the season and local availability. Eat some kind of nut every day. In addition to almonds, also eat almond butter.

Carry a few almonds in your pocket to bring you luck from Goddess.

Seshat (Sothis) will grant you wisdom for eating almonds.

botanical information:

Botanical name: *Prunus dulcis*, also called *Prunus amygdalus var. dulcus* is sweet almond , also known as *Amygdalus communis*

Common name: almond, sweet almond

Family: Rosaceae (rose)

origin:

Origin: southwest Asia

nutritional information:

Almonds are rich in monounsaturated fats, polyunsaturated fats, and antioxidants.

Almonds are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

One ounce of dry roasted almonds without salt has 1.0 milligrams of zinc, which is 6% of the U.S. Recommended Daily Value, according to the U.S. National Institutes of Health [external

link].

Soaked almonds are a food that increases sexual energy and enhances fertility.

1/4 cup almonds has 164 calories, 14 grams of fat (1 gram of saturated fat, 9 grams monounsaturated fat, and 3.5 grams polyunsaturated fat), 1 gram sugar, 3 grams fiber, and 70 mg of calcium.

preparation:

You can put a selection of nuts along with a little bit of olive oil into a blender and make fresh nut butter. Nut butter on bread (or in pita pockets) is a healthy “on-the-go” snack.

deities associated with almonds:

- Artemis (Greek Goddess)
- Chandra (India Goddess)
- Cybele (Roman Goddess)
- Hecate (Greek Goddess)
- Ptah (Kemetic/ancient Egyptian God)
- Rhea (Greek Goddess)
- Zeus (Greek God)

Chinese herbalism:

Chinese gender: slightly yang (warm)

Chinese flavor: slightly bitter

Ayurvedic herbalism:

Ayurvedic Doshas: for almond seed V- KP+ Pitta increases; Kapha increases; Vata decreases

Day 109: blueberries

Blueberry is sacred to Bast. Honor and thank Bast for blueberry.

Eat at least one serving of blueberry per month (daily during peak season), taking in account the season and local availability. Eat fresh organic blueberries during season and eat frozen organic blueberries out of season.

Eat at least one serving of fresh organic blackberries, blueberries, or raspberries per day,

when locally in season.

The more colorful a blueberry is, the more antioxidants it has produced (as well as other phytonutrients that can help your body heal itself). These antioxidants help prevent cancer and help your body fight off any disease that is forming or has formed in your body.

A rich blue blueberry is healthier than a pale blueberry.

Blueberries are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Blueberries are a good source of fiber.

According to Ayurveda, blueberries are a good food for reducing Vata, especially in the fall.

Reason to choose organic:

Blueberries are the number five (5) most important food to purchase organic because of the high level of chemical residues in non-organic blueberries, according to the 2010 study by the [Environmental Working Group](#).

Day 110: halibut

Halibut is sacred to Aset (Isis). Honor and thank Aset for halibut.

Eat at least one serving of Alaskan halibut per month, taking in account the season and local availability.

Halibut should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 111: walnuts

Walnuts, a nut, are sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for walnuts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat walnuts at least once a week. Eat some kind of nut every day.

Eat walnuts on days associated with Jupiter.

Day 112: basil

Basil is sacred to Bast. Honor and thank Bast for basil.

Eat at least one serving of basil per week, taking in account the season and local availability. You may eat basil every day.

A serving of basil (about 10 tablespoons fresh basil, whole leaves) is an important part of prenatal diet care for pregnant women.

Use basil with tomatoes, pasta, chicken, fish, and shellfish. Basil also goes well with bread, eggs, fish, and potato.

Day 113: amaranth

Amaranth, a grain, is sacred to Bast, Aset (Isis), Aset’s husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for amaranth.

Eat at least one serving of amaranth per month, taking in account the season and local availability.

Amaranth is a grain from Central America.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

The American Diabetes Association recommends amaranth (or Chinese spinach) as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Toast amaranth in a dry skillet until the seeds pop like minature popcorn.

botanical information:

Botanical name: *Amaranthus* spp.; especially *Amaranthus hypochondriacus*

Common name: amaranth, cock's comb

Family: Amaranthaceae

nutritional information:

The American Diabetes Association recommends amaranth (or Chinese spinach) as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Amaranth is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

deities associated with amaranth:

- Artemis (Greek Goddess)

Day 114: coconut oil

Coconut oil is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for coconut oil.

Use at least one serving of expeller-expressed, unrefined coconut oil at least once a week. Coconut oil is good for high temperature cooking. Keep coconut oil refrigerated to prevent rancidity.

Day 115: apricot

Apricot is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for apricots.

Eat at least one serving of organic apricot per month, taking in account the season and local availability.

Apricots are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Apricots have vitamin A and carotenes, essential nutrients in fighting cancer.

According to Ayurveda, apricots are a good food for reducing Vata, especially in the fall.

botanical information:

Botanical name: *Prunus armeniaca* (meaning Armenian plum); also called *Armeniaca vulgaris*

Common name: apricot

Family: Rosaceae (rose)

origin:

Origin: Uncertain because of prehistoric cultivation. Most likely northern and western China and central Asia. Possibly also Korea and Japan.

nutritional information:

Eat at least one serving of apricot per month, taking in account the season and local availability.

Apricots are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Apricots are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Apricots have vitamin A and carotenes, essential nutrients in fighting cancer.

storage:

Storage: Eat apricots within a week (seven days) of purchase.

Chinese herbalism:

Chinese gender: yin (cool)

Chinese flavor: sweet and slightly sour

Ayurvedic herbalism:

Ayurvedic Doshas: for **apricot seed** KV- P+ Pitta increases; Kapha decreases; Vata decreases

According to Ayurveda, apricots are a good food for reducing Vata, especially in the fall.

Day 116: peppermint

Peppermint is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for peppermint. You may eat peppermint every day.

Eat at least one serving of fresh peppermint per month, taking in account the season and local availability.

Peppermint tea can help a person lose weight when combined with a healthy diet. A peppermint tea fast is a bad idea, no matter how many celebrities try it (Victoria Beckham and Cheryl Cote).

Day 117: asparagus

Asparagus is sacred to Bast, Aset (Isis), Het Heret (Hathor), and Min. Honor and thank Bast, Aset, Het Heret, and Min for asparagus.

Eat at least one serving of asparagus per month, taking in account the season and local availability.

The American Diabetes Association recommends asparagus as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Asparagus is a good prebiotic.

botanical information:

Botanical name: *Asparagus officinalis*

Common name: asparagus, sparrowgrass

French name: asperge

Family: Liliaceae (lily)

Asparagaceae (asparagus) — the modern taxonomy separates the asparagus family from the larger lily family.

origin:

Origin: Mediterranean.

history:

History: Asparagus was banned from girls' schools by 19th century nuns who feared its phallic shape would lead to promiscuity.

nutritional information:

Asparagus is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Asparagus is a source of protein.

Asparagus is a food that increases sexual energy and enhances fertility.

nutritional value of green asparagus:

- high in Vitamin A
- high in Vitamin C
- high in folic acid
- high in fibre

Green asparagus has more nutrients than white asparagus. The darker the color, the more nutrients. White asparagus has more sugar (and is therefore sweeter tasting).

The American Diabetes Association recommends asparagus as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

selection:

Asparagus has the number seven (7) lowest pesticide load of 45 common fruits and vegetables studied in 2006 by the [Environmental Working Group](#) [external link] and is therefore a food that can be purchased conventionally-grown when organic isn't available. The EWA explains, "While washing and rinsing fresh produce may reduce levels of some pesticides, it does not eliminate them. Peeling also reduces exposures, but valuable nutrients often go down the drain with the peel. The best option is to eat a varied diet, wash all produce, and choose organic when possible to reduce exposure to potentially harmful chemicals."

According to USDA and FDA tests on commercially grown foods collected between 2000 and 2005, asparagus has a 6.7% (percentage) of samples tested with detectable pesticides, a 0.6% (percentage) of samples with two or more pesticides, an 0.1 average number of pesticides found in a sample, an average of 0.026 parts per million of all pesticides found, and 19 different pesticides found in use growing asparagus. These toxic pesticides don't apply to organic foods.

storage:

Storage: Eat asparagus within two days of purchase.

Chinese herbalism:

Chinese gender: yin (cool)

Chinese flavor: slightly sweet

Ayurvedic herbalism:

Ayurvedic Doshas: PK- V O Pitta decreases; Kapha decreases; Vata mixed

Day 118: peppers

Pepeprs are sacred to Bast and Sekhmet. Honor and thank Bast and Sekhmet for pepeprs.

Eat at least one serving of peppers per month, taking in account the season and local availability.

Day 119: rose hips

Rose hips are sacred to Bast. Honor and thank Bast for rose hips.

Rose hips are the fruit of the dog rose.

Eat rose hips at least once per month. Women should eat rose hips or drink rosehip tea daily or more often shortly before, during, and shortly after her period.

Day 120: yogurt

Yogurt is sacred to Aset (Isis). Honor and thank Aset for yogurt.

If you already eat dairy food, eat one serving of yogurt per month, as well as for several days while recovering from illness.

If you don't currently eat dairy foods, do not start eating dairy foods.

There are soy-based, non-dairy yogurts. Some people have a food reaction to soy and soy products. Do not eat soy or soy products if you are one of these people. If you can eat soy, the

recommended level is at least one serving of soy-based yogurt per week. You may eat soy-based yogurt every day.

While it is a good idea to add fruit to yogurt, you should not use pre-mixed yogurts, where the fruit is pre-blended or on the bottom.

Add your own chopped fruit (especially sliced bananas), fresh ground flaxseed, green foods powder, whey protein, or raw, unfiltered honey. Note that whey powder should eventually be removed from your diet along with other dairy products.

You can help cut calories without cutting taste by substituting Greek yogurt for mayonaise as a spread.

The fats in yogurt dissolve the chemicals in hot pepers that burn your mouth. This is why yogurt is commonly used in India after hot, spicy food.

Yogurt is an acid-producing food (measured by the ash content resulting from laboratory titration).

The American Diabetic Association recommends fat-free yogurt as one of 10 “superfoods” for those with diabetes.

Yogurt is a good source of probiotics.

Day 121: raw foods

At this point you have started introducing healthier foods (especially fruits and vegetables) into your diet.

The next step is to start switching from cooked and processed foods (even healthy ones) to raw foods. With a few important exceptions, your body gets far more nutrients from raw foods than it does from the same food cooked.

Your goal should be for at least 30% of your food intake to be raw foods. An increase in salads can help make this easier. You can also use juicing to reach this total, but eventually you will want to have 30% of your diet be raw foods not counting juices.

At the highest level of the Goddess diet plan, you should have a goal of at least 50% raw foods a day, with a minimum of 30% raw foods.

Day 122: maple syrup

Maple syrup is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and

thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for maple syrup.

Use maple syrup as a sweetener. You may use unsulfured organic cane sugar, black strap molasses, local organic honey, pure maple syrup, and stevia as your regular daily sweeteners.

Maple syrup is typically used as a sweetener.

Day 123: banana

Banana is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and het Heret for bananas.

Eat at least one serving of banana per month, taking in account the season and local availability.

Bananas are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

According to Ayurveda, bananas are excellant food for reducing Vata, especially in the fall.

Bananas can help reduce the symptoms of GERD an dsettle the stomach.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Bananas are a good prebiotic.

botanical information:

Botanical name: *Musa paradisiaca*

Common name: banana

Family: Musaceae

nutritional information:

Bananas are a starch-rich food and an important source of carbohydrates.

Bananas are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Bananas are a food that increases sexual energy and enhances fertility.

Bananas are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Ayurvedic herbalism:

According to Ayurveda, bananas are excellent food for reducing Vata, especially in the fall.

Chinese herbalism:

Chinese gender: yin (cold)

Chinese flavor: sweet

selection:

Banana has the number nine (9) lowest pesticide load of 45 common fruits and vegetables studied in 2006 by the [Environmental Working Group](#) [external link] and is therefore a food that can be purchased conventionally-grown when organic isn't available. The EWA explains, "While washing and rinsing fresh produce may reduce levels of some pesticides, it does not eliminate them. Peeling also reduces exposures, but valuable nutrients often go down the drain with the peel. The best option is to eat a varied diet, wash all produce, and choose organic when possible to reduce exposure to potentially harmful chemicals."

According to USDA and FDA tests on commercially grown foods collected between 2000 and 2005, banana has a 41.7% (percentage) of samples tested with detectable pesticides, a 2.0% (percentage) of samples with two or more pesticides, an 0.4 average number of pesticides found in a sample, an average of 0.029 parts per million of all pesticides found, and 7 different pesticides found in use growing bananas. These toxic pesticides don't apply to organic foods.

storage:

Storage: Eat bananas within two days of purchase.

preparation:

Sprinkle cinnamon on bananas (especially if you sauté your bananas).

deities associated with banana:

- Kanaloa (Hawaiian God)

Day 124: herring

Herring is sacred to Aset (Isis). Honor and thank Aset for herring.

Eat at least one serving of herring per month, taking in account the season and local availability.

A serving of herring (about one five ounce fillet) is an important part of prenatal diet care for pregnant women.

Herring should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

Basil goes well with fish and shellfish.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Spices that go well with fish include .anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 125: beets

Beets are sacred to Bast. Honor and thank Bast for beets.

Eat at least one serving of beets per month, taking in account the season and local availability.

The American Diabetes Association recommends beets as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Caraway goes well with cooked beets.

botanical information:

Botanical name: *Beta vulgaris*

Common name: beet, red beet, sugar beet

French name: betterave

origin:

Origin: Southern Europe.

nutritional information:

The American Diabetes Association recommends beets as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Beets are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Beets will make your urine and feces red or red-tinged.

Beetroot is a food that helps nourish the kidneys.

Beet roots are a food that increases sexual energy and enhances fertility.

Chinese herbalism:

Chinese gender: neutral

storage:

Storage: Beets can be safely stored for more than a week.

Day 126: chicory

Chicory is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for chicory.

Scientific and botanical name: *Cichorium intybus*

Eat at least one serving of chicory leaves per month, taking in account the season and local availability.

Eat at least one serving of chicory root per month, taking in account the season and local availability.

Eat at least one serving of chicory flower per month, taking in account the season and local availability.

Chicory leaf is also used as a spice or herb. As a spice or herb, you may use chicory every day.

Chicory is an edible flower. Consider using chicory flower in salads and as a garnish. Chicory buds can be pickled.

The American Diabetes Association recommends chicory as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Chicory is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 127: bran

Bran is sacred to Bast, Nepit's husband Neper, and Renenutet. Honor and thank Bast, Nepit, Neper, and Renenutet for bran.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Add bran to your diet.

Day 128: carrot

Carrot is sacred to Bast. Honor and thank Bast for carrots.

Eat at least one serving of carrot per month, taking in account the season and local availability.

Epona, the Celtic Goddess of horses, was later adopted as aa Roman Goddess. Outside of Gaul, Epona was often depicted in the Imperial pose, holding apples, carrots, and oats in her lap.

The American Diabetes Association recommends carrots as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Carrot is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Carrots have a high glycemic index (between 80% and 100%).

Carrots have vitamin A, vitamin C, carotenoids, lutein, fiber, calcium, and magnesium that help prevent cancer by antioxidant function and immune enhancement.

Carrots have vitamin A and carotenes, essential nutrients in fighting cancer.

Carrot tops have vitamin D, an essential nutrient in fighting cancer.

Caraway goes well with cooked carrots.

Day 129: celery

Celery is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for celery.

Eat at least one serving of organic celery per month, taking in account the season and local availability.

The American Diabetes Association recommends celery as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Celery is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Reason to choose organic:

Celery is the number one (1) most important food to purchase organic because of the high level of chemical residues in non-organic celery, according to the 2010 study by the [Environmental Working Group](#).

Day 130: cabbage

Cabbage is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for cabbage.

Cabbage is associated with the Year of the Rat.

Cabbage is a [cruciferous vegetable](#).

Eat at least one serving of cabbage per month, taking in account the season and local availability. You may eat fermented cabbage once a week or more.

Fermented cabbage is better than raw cabbage and raw cabbage is better than cooked cabbage.

The American Diabetes Association recommends cabbage (especially green cabbage) as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

The American Diabetes Association recommends coleslaw (no dressing) as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Cabbage is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Cabbage has indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by

enhancing detoxification, protecting DNA, and inhibiting tumor formation.

The healthiest form of cabbage is sauerkraut.

Kimchi and sauerkraut are good sources of probiotics.

Caraway goes well with cooked cabbage.

Day 131: chamomile tea and chamomile flower

Chamomile flower and chamomile tea is sacred to Bast. Honor and thank Bast for chamomile.

Scientific and botanical name: *Chamaemelum nobile*

Drink chamomile tea at least once per month. You may drink chamomile tea every day.

Chamomile tea helps calm the nerves, reduce stress, and is a traditional sleep remedy. Chamomile also is a good source of calcium and magnesium.

Nobody in history has ever died of an overdose of chamomile tea.

Chamomile is an edible flower. Consider using chamomile in salads and as a garnish. Chamomile has a faint apple-like flavor.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or touch composite flowers.

Day 132: eggplant

Eggplant is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for eggplant.

Eat at least one serving of eggplant per month, taking in account the season and local availability.

The American Diabetes Association recommends eggplant as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Eggplant is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Eggplant is a good prebiotic.

Day 133: horseradish

Horseradish is sacred to Bast. Honor and thank Bast for horseradish.

Eat horseradish at least once per week. You may eat horseradish every day.

Horseradish is typically used as a spice or herb.

Day 134: figs

Figs are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for figs.

Eat at least one serving of figs per month, taking in account the season and local availability.

A one cup serving of figs (about eight dried figs) is an important part of prenatal diet care for pregnant women.

Figs are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Figs are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

According to Ayurveda, raw or soaked figs are an excellent food for reducing Vata, especially in the fall.

Day 135: chicken

Remember to always immediately wash your hands after touching raw chicken or eggs. Before touching anything else. To prevent cross-contamination.

Chickens on factory farms in the US are fed specific balanced pelleted rations of corn (for energy), soybean (for protein), or another grain-based feed, vitamin and mineral supplements, and regular doses of antibiotics.

Chicken is sacred to Nwt and her husband Shu. Honor and thank Nwt and Shu for chicken.

Chickens, a native of the jungles of India, are associated with the Year of the Dragon and the Year of the Tiger.

If you already eat birds or mammals, eat one serving of chicken per month, taking in account the season and local availability.

If you don't currently eat meat, do not start eating meat.

Chicken is an acid-producing food (measured by the ash content resulting from laboratory titration).

Basil goes well with chicken.

Day 136: goat's cheese

Goat cheese is sacred to Aset (Isis). Honor and thank Aset for goat's cheese.

If you currently eat dairy products, eat at least one serving of goat's cheese per month, taking in account the season and local availability. If you do not currently eat dairy foods, don't add this item to your diet.

Goat's cheese is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 137: goat milk

Goat milk is sacred to Aset (Isis). Honor and thank Aset for goat's milk.

If you currently eat dairy products, eat at least one serving of goat milk per month, taking in account the season and local availability. If you do not currently eat dairy foods, don't add this item to your diet.

Goat milk is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 138: grapes

Grapes are sacred to Bast. Honor and thank Bast for grapes.

Eat at least one serving of organic grapes per week, taking in account the season and local availability. Only eat organic grapes.

Eat a good mixture of purple grapes, green grapes, and black grapes, with an emphasis on purple grapes. At least once a year, also eat amber/yellow, crimson, pink, and Concord grapes.

Grapes are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Grapes are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

According to Ayurveda, grapes are an excellent food for reducing Vata, especially in the fall.

Reason to choose organic:

Imported grapes are the number twelve (12) most important food to purchase organic because of the high level of chemical residues in non-organic imported grapes, according to the 2010 study by the [Environmental Working Group](#).

Day 139: mustard seed

Mustard seed is sacred to Bast. Honor and thank Bast for mustard.

Eat mustard at least once per week. You may eat mustard every day.

Mustard seed is ground and used as a spice or used as the primary ingredient in prepared mustards.

French prepared mustard get their flavor from wine or vinegar. Dijon mustard, named for the French city of its origin, gets its distinctive flavor from a combination of red and white wine.

English mustard, usually in powdered form, is extremely spicy. Add cold water and a little honey or agave.

German mustard is typically sweeter and less acidic than other prepared mustards, commonly including apple cider vinegar, brown sugar, cinnamon, and beer.

American mustard is made from a mild white mustard seed and gets its bright yellow from tumeric.

Mustard goes well with fish.

Day 140: cottage cheese

Cottage cheese is sacred to Aset (Isis). Honor and thank Aset for cottage cheese.

If you already eat dairy foods, eat one serving of cottage cheese per month, taking in account the season and local availability.

If you don't currently eat dairy foods, do not start eating dairy foods.

Cottage cheese is a good source of probiotics.

Cottage cheese is an acid-producing food (measured by the ash content resulting from laboratory titration).

Day 141: raisins

Raisins are sacred to Bast. Honor and thank Bast for raisins.

Eat at least one serving of organic raisins per month, taking in account local availability. Only eat organic raisins.

Raisins are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Raisins are recommended by the American Diabetes Association because they have a medium glycemic index (G.I.).

According to Ayurveda, most dried fruit should be avoided during a diet reducing Vata, especially in the fall.

Day 142: oyster

Oyster is sacred to Aset (Isis). Honor and thank Aset for oysters.

Eat at least one serving of oysters per month, taking in account the season and local availability.

Oysters are a kind of mollusk.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Day 143: cayenne

Cayenne is sacred to Bast. Honor and thank Bast for cayenne.

Eat Cayenne at least once per week. You may eat cayenne every day.

Cayenne is typically used as a spice or herb.

Cayenne goes well with dried beans and fish.

Day 144: kiwi

Kiwi is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for kiwi fruit.

Eat at least one serving of kiwi per month, taking in account the season and local availability.

Kiwifruit is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Kiwi is recommended by the American Diabetes Association because it has a low glycemic index (low G.I.).

Day 145: nectarine

Nectarine is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for nectarines.

Eat at least one serving of nectarine per month, taking in account the season and local availability.

Nectarines are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Reason to choose organic:

Nectarines are the number six (6) most important food to purchase organic because of the high level of chemical residues in non-organic nectarines, according to the 2010 study by the [Environmental Working Group](#).

Day 146: peaches

Peach is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for peaches.

Eat at least one serving of organic peaches per month, taking in account the season and local availability.

Peaches are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Peaches are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

According to Ayurveda, peaches are a good food for reducing Vata, especially in the fall.

Reason to choose organic:

Peaches are the number two (2) most important food to purchase organic because of the high level of chemical residues in non-organic peaches, according to the 2010 study by the [Environmental Working Group](#).

Day 147: pears

Pear is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for pears.

Eat at least one serving of organic pears per month, taking in account the season and local availability.

Pears are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Pears are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Pears are a good source of fiber.

According to Ayurveda, pears are a good food for reducing Vata, especially in the fall.

Day 148: licorice root

Licorice root is sacred to Bast. Honor and thank Bast for licorice.

Eat licorice at least once per week. You may eat licorice every day.

Licorice root is typically used as a spice or herb.

Day 149: onion

Onion is sacred to Bast. Honor and thank Bast for onions.

Eat at least one serving of onion per week, taking in account the season and local availability.

Onions were a common gift offered to the Neteru (Goddesses) of Kemet (ancient Egypt).

The American Diabetes Association recommends onions as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Onion is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Onions are a good prebiotic.

Day 150: clam

Clam is sacred to Aset (Isis). Honor and thank Aset for clams.

Eat at least one serving of clams per month, taking in account the season and local availability.

Clams are a kind of mollusk.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Day 151: barley

Barley, a grain, is sacred to Bast, Nepit's husband Neper, and Renenutet. Honor and thank Bast, Neper, and Renenutet for barley.

Eat at least one serving of whole grain barley per month, taking in account the season and

local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Persons with celiac disease (gluten-intolerant) should avoid wheat, rye, and barley.

Dr. Hagiwara claims that the green juice from the young leaves of barley grass is the most active phytonutrient-rich food in the world.

Barley is a good source of protein.

Barley is a food that helps nourish the kidneys.

Whole grain barley is an important source of dietary fiber.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Barley is a good prebiotic.

Chinese herbalism:

Chinese gender: pearl barley is yin (cool)

Chinese flavor: pearl barley is bland and slightly sweet

deities associated with barley:

- Asar (Kemetic/ancient Egyptian deity)
- Bacchus (Roman deity)
- Demeter (Greek Goddess)
- Dionysus (Greek deity)
- Osiris (Kemetic/ancient Egyptian deity)
- Vishnu (Hindu deity)

Asar (or Osiris) is the original god of barley brewing. The Roman god Bacchus and the Greek god Dionysus inherited this role in the Greco-Roman world.

Day 152: tangerine

Tangerine is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast,

Aset, Nwt, and Het Heret for tangerines.

Eat at least one serving of tangerines per month, taking in account the season and local availability.

Tangerines are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Tangerines are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Day 153: sweet bell peppers

Sweet bell pepper is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for sweet bell peppers.

Eat at least two servings of organic or hot house sweet bell peppers per month (at least one of which is orange bell pepper), taking in account the season and local availability.

The American Diabetes Association recommends peppers as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Sweet bell peppers are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Peppers have vitamin A, vitamin C, carotenoids, lutein, fiber, calcium, and magnesium that help prevent cancer by antioxidant function and immune enhancement.

Bell peppers have vitamin A, carotenes, and vitamin C, essential nutrients in fighting cancer.

Reason to choose organic:

Bell peppers are the number seven (7) most important food to purchase organic because of the high level of chemical residues in non-organic bell peppers, according to the 2010 study by the [Environmental Working Group](#).

You can substitute red peppers for pepperoni on pizzas.

Day 154: potato

Potato is sacred to Bast. Honor and thank Bast for potatoes.

Eat at least one serving of potatoes per month, taking in account the season and local availability.

The American Diabetes Association recommends potato as a starchy vegetable.

Potatoes are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Instant potato and microwaved potato have a high glycemic index (greater than 100%).

Reason to choose organic:

Potatoes are the number eleven (1a) most important food to purchase organic because of the high level of chemical residues in non-organic potatoes, according to the 2010 study by the [Environmental Working Group](#).

Caraway goes well with cooked potatoes.

Spices that go well with potato include basil, caraway, celery seed, chervil, chives, coriander, dill, marjoram, oregano, paprika, parsley, poppy seed, rosemary, tarragon, and thyme.

Day 155: aloe vera juice

Aloe vera is sacred to Bast. Honor and thank Bast for aloe vera juice.

Drink or eat aloe vera juice at least once per week. You may drink or eat aloe vera juice every day.

Day 156: prune

Prunes are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for prunes.

Eat at least one serving of prunes per month, taking in account local availability.

Prunes are dried plums. Prunes are made from selected prune plum varieties that are very high in sugar and can be dried without fermenting while still containing the plum pit.

According to Ayurveda, raw or soaked prunes are a good food for reducing Vata, especially in the fall.

Day 157: trout

Trout is sacred to Aset (Isis). Honor and thank Aset for trout.

Eat at least one serving of trout (especially rainbow trout) per month, taking in account the season and local availability.

Trout should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include .anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 158: cranberry

Cranberry is sacred to Bast. Honor and thank Bast for cranberries.

Eat at least one serving of cranberries per month, taking in account the season and local availability.

Cranberries should not be used often unless you need a strong diaretic.

Cranberry juice helps prevent urinary problems, especially bacterial infections.

According to Ayurveda, cranberries may be eaten occasionally during a diet reducing Vata, especially in the fall.

Cranberries have moderate levels of Vitamin C, dietary fiber, and manganese (an essential mineral), as well as other essential micronutrients.

Cranberries are a source of polyphenol antioxidants, beneficial to the cardiovascular system and immune system and having anti-cancer properties.

botanical information:

Botanical name: Primarily *Vaccinium macrocarpon*, but also *Vaccinium erythrocarpum*, *Vaccinium microcarpum*, and *Vaccinium oxycoccos*

Obsolete botanical names:

Oxycoccos erythrocarpus = *Vaccinium erythrocarpum*

Oxycoccus macrocarpus = *Vaccinium macrocarpon*

Oxycoccus microcarpus = *Vaccinium microcarpum*

Oxycoccus palustris = *Vaccinium oxycoccus*

Common name: cranberry

Vaccinium erythrocarpum: southern mountain cranberry

Vaccinium macrocarpus: American cranberry, bearberry, large cranberry

Vaccinium microcarpum: small cranberry

Vaccinium oxycoccus: common cranberry, northern cranberry

Canadian name: cranberry, mossberry

English name: fenberry (named for fens or marshes)

native American name: sassamanash

Use the botanical name when ordering seeds (bulbs, etc.) or when looking up information in the library. Common names vary by nation, culture, and region, and sometimes the same common name is applied to different plants.

The word cranberry originally started as crane berry, because early European settlers to North America thought the flower and associated parts looked similar to the head and neck of a crane.

Family: Ericaceae (heath or heather family)

Kind: Evergreen Dwarf Shrub or Trailing Vines.

Habitat: acidic bogs in Northern hemisphere

Height: 5 to 20 centimeters tall

Spread: up to 2 meters long

Leaf: small evergreen leaf

Pollination: honey bees

Flower: dark pink with reflexed petals

Fruit: cranberry; starts as small white berry, but grows to a dark red berry that is larger than the leaves

Fruiting Time: late September to early October

origin:

Origin: Northern hemisphere, including northern North America, northern Europe, and northern Asia

Wisconsin produces more cranberries than any other U.S. state.

part used:

Part Used: Berry.

nutritional information:

Cranberries have moderate levels of Vitamin C, dietary fiber, and manganese (an essential mineral), as well as other essential micronutrients.

Cranberry juice helps prevent urinary problems, especially bacterial infections.

Cranberries are a source of polyphenol antioxidants, beneficial to the cardiovascular system and immune system and having anti-cancer properties.

nutritional value per 100 grams (raw cranberries):

- **Energy:** 46 kcal
- **Fiber:** (total dietary) 4.6 g
- **Sugars:** 4.04 g
- **Calcium:** Ca 8 mg
- **Magnesium:** Mg 6 mg
- **Manganese:** Mn 0.15 mg
- **Phosphorus:** P 13 mg
- **Potassium:** K 85 mg
- **Sodium:** Na 2 mg
- **Vitamin C:** total ascorbic acid 13.3 mg
- **Vitamin A:** 60 IU
- **Vitamin K:** 5.1 mg
- **Beta Carotene:** 36 mg
- **Lutein and zeaxanthin:** 91 mg

storage:

Fresh cranberries can be frozen for up to nine months.

preparation:

Top oatmeal with dried cranberries. Helps gum health and detoxes kidneys. Helps protect against bladder infections. 1/4 cup of dried cranberries has 92 calories, 0 grams of fat, 20 grams of sugar, and 2 grams of fiber.

magickal correspondences and uses:

Western element (as juice): water

Western element (as berry): fire

Magickal uses of cranberry juice: protection

ritual uses:

Ritual uses of cranberry juice: Sacred to Marjatta

Ritual uses of cranberries and cranberry juice: Yule or Winter Solstice

deities associated with cranberry:

- Marjatta (Finnish Goddess)

cautions and contraindications:

Cautions and contraindications: Safe for use during pregnancy and breast-feeding. Those with family or individual history of calcium-oxalate kidney stones should avoid long term use of cranberry supplements.

planting and growing:

Plants in the ericaceae (heath or heather) family, such as the cranberry, are calcifuge, that is they don't like lime, and grow best in acidic soil.

Day 159: radish

Radish is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for radishes.

Eat at least one serving of radishes per month, taking in account the season and local availability.

The American Diabetes Association recommends radishes as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Radishes are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Radishes have indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Day 160: pumpkin seeds

Pumpkin seed is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast,

Aset, and Asar for pumpkin seeds.

Eat at least one serving of pumpkin seeds per month, taking in account the season and local availability.

A serving of pumkin seeds (about a half a cup) is an important part of prenatal diet care for pregnant women.

Pumpkin seeds are an acid-producing food (measured by the ash content resulting from laboratory titration).

Day 161: agave

Agave is sacred to Bast. Honor and thank Bast for agave.

Use agave as a sweetener. You may use unsulfured organic cane sugar, black strap molasses, local organic honey, pure maple syrup, and stevia as your regular daily sweeteners.

Agave is typically used as a sweetener.

Day 162: wild rice

Wild rice, a pseudo-grain, is sacred to Bast. Honor and thank Bast for wild rice.

Eat at least one serving of wild rice per month, taking in account the season and local availability.

Wild rice is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 163: brown rice

brown rice

Brown rice, a grain, is sacred to Bast and Renenutet. Honor and thank Bast and Renenutet for brown rice.

Eat at least one serving of brown rice per month, taking in account the season and local availability.

Eat white rice only on rare occasions. White rice is strongly discouraged.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Brown rice is an acid-producing food (measured by the ash content resulting from laboratory titration).

Puffed rice, instant rice, and puffed rice cakes have a high glycemic index (greater than 100%). White rice and brown rice have a high glycemic index (between 80% and 100%).

Whole grain brown rice includes the endosperm (starch), bran (fiber), and whole germ (most nutrients). White rice has only the polished starchy interior endosperm.

microwave

Brown Rice: Rinse brown rice and place it in a microwave-safe bowl with water or broth. Cover the bowl and microwave on high for about 15-20 minutes or until the rice is cooked and tender. Let it sit for a few minutes before fluffing with a fork. [ChatGPT]

Day 164: winter squash

Winter squash is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for winter squashes.

Eat at least one serving of organic winter squash per month, taking in account the season and local availability.

The American Diabetes Association recommends squash (including cushaw squash) as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

The American Diabetes Association recommends acorn squash and butternut squash (both winter squashes) as a starchy vegetable.

Winter squash is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Caraway goes well with cooked winter squash.

Day 165: summer squash

Summer squash is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for summer squashes.

Eat at least one serving of summer squash per month during hot weather, taking in account the season and local availability.

The American Diabetes Association recommends summer squash (including crockneck and zucchini) as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Summer squash is an acid-producing food (measured by the ash content resulting from laboratory titration).

Day 166: black pepper

Black pepper is sacred to Bast. Honor and thank Bast for black pepper.

Eat black pepper at least once per week. You may eat black pepper every day.

Black pepper is typically used as a spice or herb.

Pepper goes well with dried beans and chicken eggs.

White pepper is usually used as a substitute for black pepper when black pepper would discolor a light-colored or white dish..

Day 167: soybean

Soybean is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for soybeans.

Eat at least one serving of soybeans per week, taking in account the season and local availability. You may eat soy or soy products every day.

Some people have a food reaction to soy and soy products. Do not eat soy or soy products if you are one of these people.

The American Diabetes Association recommends soy-based fake meat products (such as veggie burgers) as a protein source.

Soybeans an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Soy beans are healthier than soy bean products. Soy-based fake meat products are healthier than real meat. Soy-based meat products should be used to transition away from meat and may be used on rare occasions.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Soy beans are a good prebiotic.

Tofu ice cream has a high glycemic index (greater than 100%).

Day 168: soy cheese

Soy cheese is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for soy cheese.

Eat at least one serving of soy cheese per month, taking in account the season and local availability.

Some people have a food reaction to soy and soy products. Do not eat soy or soy products if you are one of these people.

Soy cheese is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 169: plant milk

Plant milk is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for plant milks.

Eat at least one serving of plant milk per week, taking in account the season and local availability.

The recommended plant milk is hemp seed milk. Other good alternatives are soy milk, almond milk, and rice milk.

Soy milk is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Some people have a food reaction to soy and soy products. Do not eat soy or soy products if you are one of these people.

Day 170: cherries

Cherry is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for cherries.

Eat at least one serving of organic cherries per month (daily during peak season), taking in account the season and local availability. Cherries should be eaten occasionally.

Eat cherries on days associated with Venus.

Cherry is an acid-producing food (measured by the ash content resulting from laboratory titration).

Cherries are a low Glycemic Index (low GI) food, appropriate for diabetics.

Cherries are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Cherries are a good prebiotic.

According to Ayurveda, cherries are a good food for reducing Vata, especially in the fall.

Reason to choose organic:

Cherries are the number ten (10) most important food to purchase organic because of the high level of chemical residues in non-organic cherries, according to the 2010 study by the [Environmental Working Group](#).

Day 171: sea bass

Sea bass is sacred to Aset (Isis). Honor and thank Aset for sea bass.

Eat at least one serving of sea bass per month, taking in account the season and local availability.

Sea bass should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 172: turnips

Turnip roots are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for turnips.

Eat at least one serving of turnip root (better known as just turnips) per month, taking in account the season and local availability.

Turnips have indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Caraway goes well with cooked turnips.

Day 173: nutmeg

Nutmeg is sacred to Bast. Honor and thank Bast for nutmeg.

Eat nutmeg at least once per week. You may eat nutmeg every day.

Nutmeg is typically used as a spice or herb.

Day 174: pinto bean

Pinto beans is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for pinto beans.

Eat at least one serving of pinto bean per month, taking in account the season and local availability.

A serving of pinto beans (about half a cup, dried) is an important part of prenatal diet care for pregnant women.

The American Diabetes Association recommends pinto beans as a protein source.

Day 175: leeks

Leeks are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for leeks.

Eat at least one serving of leeks per month, taking in account the season and local availability.

A serving of leeks (one cup, raw) is an important part of prenatal diet care for pregnant women.

The American Diabetes Association recommends leeks as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Leeks are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Leeks are a good prebiotic.

Day 176: globe artichoke

Artichoke is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for globe artichokes.

Eat at least one serving of globe artichoke per month, taking in account the season and local availability.

The American Diabetes Association recommends artichoke and artichoke hearts as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

A serving of artichokes (about one medium artichoke) is an important part of prenatal diet care for pregnant women.

Artichokes are a good source of fiber.

botanical information:

Botanical name: *Cynara cardunculus*, also called *Cynara scolymus*

Common name: artichoke, globe artichoke

French name: artichaut

Italian name: articiocco

Family: Asteraceae (aster, daisy, or sunflower family)

Kind: Perennial Thistle.

Height: 1-1/2 to 2 meters tall

origin:

Origin: southern Europe, Mediterranean, Sicily, Egypt, Canary Islands. Possibly originally from the Maghreb in North Africa (artichokes still grow wild there)

history:

History: The Greeks grew artichokes in Sicily. The Greeks called globe artichokes *kaktos*.

History: Globe artichoke seeds discovered in excavation of Mons Claudianus in Egypt, from the Roman period. The Romans called artichokes *carduus*.

History: Globe artichokes were grown in the Maghreb of North Africa by the Muslims. The Arabs called globe artichokes *Ardi-Shoki*, meaning “ground thorny”. The later Arabic name *al-kharshuf* was the source of the plant name in most European languages.

History: Globe artichokes were grown in Naples by the middle 9th century.

nutritional information:

Artichokes are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Artichokes are a source of protein.

Artichokes help keep the liver clean and healthy.

Artichokes are a food that increases sexual energy and enhances fertility.

nutritional value per 100 grams:

- **Calories:** 40-50 calories
- **Water:** 85%
- **Proteins:** 3 grams
- **Fat:** 0.29 grams
- high in Vitamin A
- high in Vitamin B
- high in phosphorus
- high in minerals

The American Diabetes Association recommends artichoke and artichoke hearts as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

storage:

Storage: Eat artichokes within two days of purchase.

deities associated with artichoke:

- Jupiter (Roman God)
- Zeus (Greek God)

Myth: Jupiter (or Zeus) fell in love with Cynara, a beautiful girl with ash blonde hair. Cynaraa rejected Jupiter (or Zeus), so he turned her into the first artichoke (which had the Roman name Cynara, leading to the modern botanical name *Cynara scolymus*).

Day 177: albacore tuna

Albacore tuna is sacred to Aset (Isis). Honor and thank Aset for albacore tuna.

Eat at least one serving of troll- or pole-caught albacore tuna per month, taking in account the season and local availability.

Albacore tuna should be wild caught, never farm raised. Choose troll- or pole-caught albacore tuna from the United States or British Columbia.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 178: açai berry

Eat at least one serving açai berries at least once per week. You may eat açai berries every day. You may meet half of this requirement with açai berry juice.

Because açai is an extremely fragile fruit, outside of Brazil it is typically distributed as açai pulp.

Açai berry is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for açai berries.

[read the chapter on açai berry](#)

Day 179: molasses

Molasses is sacred to Bast. Honor and thank Bast for blackstrap molasses.

Eat at least three servings of blackstrap molasses per week.

Use black strap molasses as a sweetener. You may use unsulfured organic cane sugar, black strap molasses, local organic honey, pure maple syrup, and stevia as your regular daily

sweeteners.

A serving of molasses (about one tablespoon) is an important part of prenatal diet care for pregnant women.

Day 180: sunflower seeds

Sunflower seeds are sacred to Bast. Honor and thank Bast for sunflower seeds.

Eat at least one serving of sunflower seeds per month, taking in account the season and local availability.

Sunflower seeds are an acid-producing food (measured by the ash content resulting from laboratory titration).

Sunflower seed kernels are an important source of dietary fiber.

Day 181: cocoa and dark chocolate

Cocoa (the source of chocolate) is sacred to Bast. Honor and thank Bast for cocoa and chocolate.

Eat cocoa or dark chocolate at least once per month. You may eat dark chocolate (at least 70%) often. Women may eat up to 100 calories of dark chocolate per day.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Dark chocolate is a good prebiotic.

Day 182: raw cacao

Raw cacao is sacred to Bast. Honor and thank Bast for cacao beans.

Eat raw cacao at least once per month. You may eat raw cacao more often.

Raw cacao beans are the source of cocoa powder, which is used to make chocolate. In the Dutch method, raw cacao beans are scorched at temperatures of up to 150°C and doused with solvents, resulting in cocoa.

Day 183: chili pepper

Chili pepper is sacred to Bast. Honor and thank Bast for chili pepper.

Eat Chili pepper at least once per week. You may eat chili pepper every day.

Powdered chili pepper is typically used as a spice or herb.

Chili goes well with dried beans and corn.

Day 184: kefir

Kefir is sacred to Aset (Isis). Honor and thank Aset for kefir.

Drink at least one serving of kefir at least once a month, taking in account the season and local availability.

If you do not currently eat dairy foods, do not start drinking kefir, unless you currently eat any animals, in which case it is important to drink at least one serving of kefir a week as long as you continue to eat land animals. You may consider drinking kefir to counterbalance eating fish and seafood.

Kefir is a good source of probiotics.

Day 185: blue-green algae

Wild blue-green algae (BGA) is sacred to Aset (Isis). Honor and thank Aset for wild blue-green algae.

Eat at least one serving of wild blue-green algae (BGA) at least once a week. You may eat wild blue-green algae every day.

Day 186: coconut water

Coconut water is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for coconut water.

Drink at least one serving of coconut water at least once a week, taking in account the season and local availability. You may drink coconut water every day.

Drink coconut water instead of commercial energy drinks during particularly heavy workouts, exercise, or physical labor..

Day 187: hot peppers

Hot peppers are sacred to Bast. Honor and thank Bast for hot peppers.

Eat at least one serving of hot peppers at least once a week, taking in account the season and local availability. You may eat hot peppers every day.

Note that different people have different tolerances for hot peppers, and what may be a very mild pepper to one person may be an extremely hot pepper to another.

Make sure that you pick a hot pepper that is an appropriate range for your body. I personally find peppercini to be hot (don't laugh), while I know people who find the jalapeño pepper to be rather mild. The important thing is to find a hot pepper that gets your heart pumped up and that you can feel Goddess blessings pumping through your blood stream.

Both alcohol (beer) and fat (yogurt) produce a chemical reaction that helps dissolve the hotness in your mouth after eating hot peppers.

Day 188: spelt

Spelt, a grain, is sacred to Bast and Renenutet. Honor and thank Bast and Renenutet for spelt.

Eat at least one serving of spelt at least once a month, taking in account the season and local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Spelt is an ancient grain.

Day 189: brewer's yeast

Brewer's yeast is sacred to Bast. Honor and thank Bast for brewer's yeast.

Eat at least one serving of brewer's yeast at least once a month, taking in account the season and local availability.

Day 190: lentils

Lentils are sacred to Bast. Honor and thank Bast for lentils.

Eat at least one serving of lentils per month, taking in account the season and local availability.

The American Diabetes Association recommends lentils as a protein source.

Lentils are an acid-producing food (measured by the ash content resulting from laboratory titration).

Lentils are an important source of dietary fiber.

Day 191: arame

Arame is sacred to Aset (Isis). Honor and thank Aset for arame.

Eat at least one serving of arame seaweed per week, taking in account the season and local availability.

Arame is also called sea oak.

Many Americans aren't used to seaweeds as a normal part of their diet (other than as a wrapping for sushi). and think that seaweeds will taste yucky. Arame looks like little black threads (turns dark brown when cooked) and has a sweet, mild taste. Arame is great for adding raw to salads and soups, as well as sautéing with root vegetables or tofu.

Day 192: shitake mushroom

Shitake mushroom is sacred to Bast. Honor and thank Bast for shitake mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked shitake mushrooms per week, taking in account the season and local availability. You may eat shitake mushrooms daily.

Many Americans aren't used to eating a lot of mushrooms, other than white or brown "button" mushrooms. Shitake is one of the more popular mushrooms in Asian countries. Shitake is fairly large and available both fresh and dried. Soak dried Shitake before cooking. Cut off and discard the hard stems before cooking. Shitake can be sautéed for as a burger patty or stuffed with vegetables. Shitake can be cut into pieces and added to a salad, soup, or side dish.

Shitake mushrooms contain phytochemicals that enhance immune functions.

Day 193: almond oil

Almond oil is sacred to Bast, Aset (Isis), Het Heret (Hathor), Nwt, Satis, Seshat (Sothis), Amon-Ra, and Anket. Honor and thank Bast, Aset, Het Heret, Nwt, Satis, Seshat, Amon-Ra, and Anket for almond oil.

Use almond oil at least once a month. Keep almond oil refrigerated to prevent rancidity.

Day 194: dill leaf

Dill leaf is sacred to Bast and Djehuti. Honor and thank Bast and Djehuti for dill.

Eat fresh dill at least once per week, taking in account the season and local availability. You may eat fresh dill every day.

Eat dill leaf on days associated with Mercury.

Day 195: royal jelly

Royal jelly, a bee product, is sacred to Bast. Honor and thank Bast for royal jelly.

Eat at least one serving of royal jelly at least once a month, taking in account the season and local availability.

Royal jelly is a bee product.

Day 196: burdock root

Burdock root is sacred to Bast. Honor and thank Bast for burdock root.

Eat at least one serving of burdock root per week, taking in account the season and local availability.

Burdock root is highly recommended in the Macrobiotic Diet.

botanical information:

Botanical name: can be any of *Arctium* spp., but especially *Arctium lappa* (edible burdock,

greater burdock, or lappa burdock)

Common name: burdock root, edible burdock, greater burdock, lappa burdock

Japanese name: gobo

Korean name: ueong

Portuguese name: bardana

Use the botanical name when ordering seeds (bulbs, etc.) or when looking up information in the library. Common names vary by nation, culture, and region, and sometimes the same common name is applied to different plants.

Family: Asteraceae [formerly called Compositae] (aster, daisy, or sunflower family)

origin:

Origin: most of Asia and Europe

nutritional information:

Burdock root is highly recommended in the Macrobiotic Diet.

[Burdock root] Is an excellent blood purifier and cleanser; aids in healing skin blemishes, arthritis & rheumatism; promotes healthy kidney function.

—courtesy of [Austin Nutritional Research](#)

magickal correspondences and uses:

Gender: feminine (traditional western European magickal gender)

Chinese herbalism:

Chinese gender: yin (cool)

Chinese flavor: pungent and bitter

Ayurvedic herbalism:

Ayurvedic Doshas: PK- V+ Pitta decreases; Kapha decreases; Vata increases.

cautions and contraindications:

Cautions and contraindications: Burdock is believed to be **safe**.

Day 197: chestnuts

Chestnuts are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for chestnuts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of chestnuts per month, taking in account the season and local availability.

Chestnuts are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 198: broccoli sprouts

Broccoli sprouts are sacred to Bast. Honor and thank Bast for broccoli sprouts.

Eat at least one serving of broccoli sprouts at least twice a month, taking in account the season and local availability. You may eat broccoli sprouts almost every day.

Toss broccoli sprouts into salads. And, of course, eat them fresh and uncooked in a sprout salad.

Because broccoli sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you’ve eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this “Chinese food syndrome”.

Day 199: whey protein

Whey protein is sacred to Aset (Isis). Honor and thank Aset for whey protein.

Eat at least a few servings of whey protein at least once a week, taking in account the season and local availability.

Cut back or eliminate dairy products from your diet. If you do not currently eat milk or dairy products, do not start whey protein, but if you currently eat meat or dairy, use whey protein as part of your process of abandoning meat.

Day 200: green peas

Green peas are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for green peas.

Peas are associated with the Year of the Rat.

Eat at least one serving of green peas per month, taking in account the season and local availability.

The American Diabetes Association recommends dried green peas (including split peas) as a protein source. The American Diabetes Association recommends pea pods as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

The American Diabetes Association recommends green peas as a starchy vegetable.

Peas are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Peas and split peas are a good source of fiber.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Peas are a good prebiotic.

Day 201: boysenberry

Boysenberry is sacred to Bast. Honor and thank Bast for boysenberries.

Eat at least one serving of boysenberries at least once a month, taking in account the season and local availability.

Day 202: scallops

Scallops is sacred to Aset (Isis). Honor and thank Aset for scallops.

Eat at least one serving of scallops per month, taking in account the season and local availability.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Day 203: hijiki

Hijiki is sacred to Aset (Isis). Honor and thank Aset for hijiki.

Eat at least one serving of hijiki seaweed per month, taking in account the season and local availability.

You can marinate hijiki in sesame seed oil to create a quick salad.

Day 204: brown mushroom

Brown mushroom is sacred to Bast. Honor and thank Bast for brown mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked brown mushrooms per month, taking in account the season and local availability.

Day 205: sunflower oil

Sunflower oil is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for sunflower oil.

Use organic, expeller pressed, high-oleic sunflower oil at least once a month. Keep sunflower oil refrigerated to prevent rancidity.

Day 206: rose

Rose is sacred to Bast. Honor and thank Bast for rose.

Scientific and botanical name: *Rosa rugosa* or *Rosa gallica officinalis*

Eat rose at least once per week. You may eat rose every day.

Rose is an edible flower. Consider using rose in salads and as a garnish. Rose is often used as

an herb or garnish or to make rose water. Always remove the bitter white portions of the petals. The stronger the fragrance, the stronger the flavor.

Day 207: buckwheat or kasha

Buckwheat (also known as kasha), a grain, is sacred to Bast, Aset (Isis), Aset's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for buckwheat.

Eat at least one serving of buckwheat per month, taking in account the season and local availability.

Hulled buckwheat kernels are called groats.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Buckwheat is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 208: bee pollen

Bee pollen is sacred to Bast. Honor and thank Bast for bee pollen.

Eat at least one serving of bee pollen at least once a week, taking in account the season and local availability. You may eat bee pollen every day.

Day 209: garbanzo beans or chickpeas

Garbanzo beans (also known as chickpeas) are sacred to Bast. Honor and thank Bast for chickpeas.

Eat at least one serving of garbanzo beans (chickpeas) at least once a week, taking in account the season and local availability.

Day 210: macadamia nuts

Macadamia, a nut, is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for macadamia nuts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of macadamia nuts at least once a week. Eat some kind of nut every day.

Day 211: mustard sprouts

Mustard sprouts are sacred to Bast. Honor and thank Bast for mustard sprouts.

Eat at least one serving of mustard sprouts at least twice a month, taking in account the season and local availability.

Toss mustard sprouts into salads. And, of course, eat them fresh and uncooked in a sprout salad.

Because mustard sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you’ve eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this “Chinese food syndrome”.

Day 212: watermelon

Watermelon is sacred to Bast. Honor and thank Bast for watermelons.

Eat at least one serving of watermelon per month, taking in account the season and local availability.

Watermelon is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Watermelon is recommended by the American Diabetes Association because it has a medium glycemic index (G.I.).

According to Ayurveda, melons may be eaten occasionally during a diet reducing Vata, especially in the fall.

Day 213: crustacea

Crustacea are sacred to Aset (Isis). Honor and thank Aset for crustacea.

Eat at least two servings of crustacea per month, taking in account the season and local availability. The recommended crustacea are crawfish, lobster, prawns, and shrimp.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Day 214: kombu

Kombu is sacred to Aset (Isis). Honor and thank Aset for kombu.

Eat at least one serving of kombu seaweed per month, taking in account the season and local availability.

Day 215: white mushroom

White mushroom is sacred to Bast. Honor and thank Bast for white mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked white mushrooms per month, taking in account the season and local availability.

Day 216: safflower oil

Safflower oil is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for safflower oil.

Use organic, expeller pressed, high-oleic safflower oil at least once a month. Keep safflower oil refrigerated to prevent rancidity.

Day 217: paprika

Paprika is sacred to Bast. Honor and thank Bast for paprika.

Eat paprika at least once per week. You may eat paprika every day.

Paprika is typically used as a spice or herb.

Paprika goes well with chicken eggs and potato.

Day 218: propolis

Propolis, a bee product, is sacred to Bast. Honor and thank Bast for propolis.

Eat at least one serving of propolis at least once a month, taking in account the season and local availability.

Propolis is a bee product.

Day 219: couscous

Couscous, a grain, is sacred to Bast, Aset, Aset's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for couscous.

Eat at least one serving of couscous at least twice a month, taking in account the season and local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Couscous is a grain.

Day 220: radish sprouts

Radish sprouts are sacred to Bast. Honor and thank Bast for radish sprouts.

Eat at least one serving of radish sprouts at least once a month, taking in account the season and local availability.

Radish sprouts are spicy.

Toss radish sprouts into salads. Radish sprouts can be used in coleslaw. Radish sprouts can be used in wraps and roll-ups. Stir-fry radish sprouts with other vegetables. Mix radish sprouts with soft cheeses, tofu, yogurt, or kefir to make a dip. Place radish sprouts on top of omelets or scrambled eggs. Add radish sprouts to sushi. Sauté radish sprouts with onions. And, of course, eat them fresh and uncooked in a sprout salad.

Because radish sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 221: noni fruit

Noni fruit is sacred to Bast. Honor and thank Bast for noni.

Eat at least one serving of noni at least once a month, taking in account the season and local availability.

Noni juice is one of the better options for your fruit juice requirements.

Day 222: mollusks

Mollusks are sacred to Aset (Isis). Honor and thank Aset for mollusks.

Eat at least two servings of mollusks per month, taking in account the season and local availability.

Some of the mollusks to eat include clams, mussels, scallops, and oysters..

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Day 223: nekombu

Nekombu is sacred to Aset (Isis). Honor and thank Aset for nekombu.

Eat at least one serving of nekombu seaweed per month, taking in account the season and local availability.

Nekombu is the root of kombu.

Day 224: enoki mushroom

Enoki mushroom (also known as enokitake mushroom or enokidake mushroom) is sacred to Bast. Honor and thank Bast for enoki mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked enoki mushrooms per week, taking in account the season and local availability. You may eat enoki mushrooms daily.

Enoki mushrooms contain phytochemicals that enhance immune functions.

Day 225: hazelnut oil

Hazelnut oil is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra for hazelnut oil.

Use hazelnut oil at least once a month. Keep hazelnut oil refrigerated to prevent rancidity.

Day 226: marjoram

Marjoram is sacred to Bast. Honor and thank Bast for marjoram.

Eat fresh marjoram at least once per week. You may eat marjoram every day.

Marjoram is typically used as a spice or herb.

Marjoram goes well with corn, fish, potato.

Day 227: Brazil nuts

Brazil nuts are sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for Brazil nuts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of Brazil nuts at least once a week. Eat some kind of nut every day.

Day 228: onion sprouts

Onion sprouts are sacred to Bast. Honor and thank Bast for onion sprouts.

Eat at least one serving of onion sprouts at least once a month, taking in account the season and local availability.

Onion sprouts are spicy.

Toss onion sprouts into salads. And, of course, eat them fresh and uncooked in a sprout salad.

Because onion sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you’ve eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this “Chinese food syndrome”.

Day 229: olive

Olive is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for olives.

Eat at least one serving of olives per month, taking in account the season and local availability.

Olives are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 230: dates

Date is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for dates.

Eat at least one serving of madjool dates per month, taking in account the season and local availability.

Dates are recommended by the American Diabetes Association because they have a medium glycemic index (medium G.I.).

According to Ayurveda, raw or soaked dates are an excellent food for reducing Vata, especially in the fall.

Day 231: white fleshed fish

White fleshed fish are sacred to Aset (Isis). Honor and thank Aset for white fleshed fish.

Eat at least one serving of white fleshed fish per week, taking in account the season and local availability.

Some recommended white fleshed fish are cod, flounder, halibut, orange roughy, pollack, and rockfish.

White fleshed-fish should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 232: kelp

Kelp is sacred to Aset (Isis). Honor and thank Aset for kelp.

Eat at least one serving of kelp seaweed per month, taking in account the season and local availability.

Kelp helps regulate the thyroid, which helps in losing weight.

Day 233: oyster mushroom

Oyster mushroom is sacred to Bast. Honor and thank Bast for oyster mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked oyster mushrooms per week, taking in account the season and local availability. You may eat oyster mushrooms daily.

Oyster mushrooms contain phytochemicals that enhance immune functions.

Day 234: dried red pepper

Dried red peppers are sacred to Bast. Honor and thank Bast for red peppers.

Eat at least one serving of dried red pepper at least once a week, taking in account the season and local availability. You may eat dried red pepper every day.

Dried red pepper is typically used as a spice or herb.

Day 235: sauerkraut

Sauerkraut is sacred to Bast. Honor and thank Bast for sauerkraut.

Cabbage is associated with the Year of the Rat.

Eat at least one serving of sauerkraut at least once a week, taking in account the season and local availability. You may eat a little sauerkraut daily.

Sauerkraut and kimchi are forms of fermented cabbage.

Sauerkraut is Germanic origin.

Day 236: cabbage sprouts

Cabbage sprouts are sacred to Bast. Honor and thank Bast for cabbage sprouts.

Cabbage is associated with the Year of the Rat.

Eat at least one serving of cabbage sprouts at least once a month, taking in account the season and local availability.

Toss cabbage sprouts into salads. Cabbage sprouts can be used in coleslaw. Blend cabbage

sprouts with vegetable juices. And, of course, eat them fresh and uncooked in a sprout salad.

Because cabbage sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 237: goji or wolfberry

Goji berry (or wolfberry) is sacred to Bast. Honor and thank Bast for goji.

Eat at least one serving of goji per week, taking in account the season and local availability. Goji berries are usually eaten as a dried fruit.

Day 238: mackerel

Mackerel is sacred to Aset (Isis). Honor and thank Aset for mackerel.

Eat at least one serving of mackerel per month, taking in account the season and local availability.

Mackerel should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 239: wakame

Wakame is sacred to Aset (Isis). Honor and thank Aset for wakame.

Eat at least one serving of wakame seaweed per month, taking in account the season and local availability.

You can add wakame to soups.

Day 240: tree ear mushroom

Tree ear mushroom is sacred to Bast. Honor and thank Bast for tree ear mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked tree ear mushrooms per week, taking in account the season and local availability. You may eat tree ear mushrooms daily.

Day 241: lemon balm

Lemon balm is sacred to Bast. Honor and thank Bast for lemon balm.

Eat fresh lemon balm at least twice per month. You may eat lemon balm every day.

Lemon balm is typically used as a spice or herb.

Lemon balm is a traditional remedy for stress and anxiety.

Day 242: clover sprouts

Clover sprouts are sacred to Bast. Honor and thank Bast for clover sprouts.

Eat at least one serving of clover sprouts at least once a month, taking in account the season and local availability.

Toss clover sprouts into salads. Clover sprouts can be used in coleslaw. Stir-fry clover sprouts with other vegetables. Place clover sprouts on top of omelets or scrambled eggs. Sauté clover sprouts with onions. And, of course, eat them fresh and uncooked in a sprout salad.

Because clover sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 243: honeydew melon

Honeydew melon is sacred to Bast. Honor and thank Bast for honeydew melons.

Eat at least one serving of honeydew melon per month, taking in account the season and local availability.

Honeydew melons are recommended by the American Diabetes Association because they have a medium glycemic index (G.I.).

According to Ayurveda, melons may be eaten occasionally during a diet reducing Vata, especially in the fall.

Day 244: sardine

Sardine is sacred to Aset (Isis). Honor and thank Aset for sardines.

Eat at least one serving of sardines per month, taking in account the season and local availability.

Sardine should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 245: mekabu

Mekabu is sacred to Aset (Isis). Honor and thank Aset for mekabu.

Eat at least one serving of mekabu seaweed per month, taking in account the season and local availability.

Mekabu is the flowering sprout of wakame.

Day 246: portobello mushroom

Portobello mushroom is sacred to Bast. Honor and thank Bast for portobello mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked portobello mushrooms per month, taking in account the season and local availability. Eat portobello mushrooms less often than other mushrooms.

You can cut calories and cholesterol in a tasty manner by substituting portobello mushrooms for beef.

Day 247: sage

Culinary sage (not to be confused with ceremonial sage) is sacred to Bast and Artemis. Honor and thank Bast for sage.

Eat fresh culinary sage at least once per month. Sage should not be eaten in large amounts over a long period of time.

Culinary sage is typically used as a spice or herb.

Culinary sage goes well with dried beans, bread, chicken eggs, and fish.

Day 248: hazelnuts

Hazelnuts are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for hazelnuts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of hazelnuts per month, taking in account the season and local availability.

Day 249: sunflower sprouts

Sunflower sprouts are sacred to Bast. Honor and thank Bast for sunflower sprouts.

Eat at least one serving of sunflower sprouts at least once a month, taking in account the season and local availability.

Toss sunflower sprouts into salads. Sunflower sprouts can be used in wraps and roll-ups. Add sunflower sprouts to sushi. And, of course, eat them fresh and uncooked in a sprout salad.

Because sunflower sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 250: turnip greens

Turnip greens are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for turnips.

Eat at least one serving of turnip greens per month, taking in account the season and local availability.

The American Diabetes Association recommends turnip greens as a non-starchy vegetable. The American Diabetes Association recommends turnip as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Turnips have indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Turnip greens have vitamin D, an essential nutrient in fighting cancer.

Turnip greens are an important source of dietary fiber.

Day 251: papaya

Papaya is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for papaya.

Eat at least one serving of papaya per month, taking in account the season and local availability. Red-flshed papaya is preferred.

Papaya is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Papaya is recommended by the American Diabetes Association because it has a low glycemic index (low G.I.).

Papaya has vitamin C, an essential nutrient in fighting cancer.

According to Ayurveda, papaya is an excellent food for reducing Vata, especially in the fall.

Day 252: alaria

Alaria is sacred to Aset (Isis). Honor and thank Aset for alaria.

Eat at least one serving of alaria seaweed per month, taking in account the season and local availability.

Day 253: crimini mushroom

Crimini mushroom is sacred to Bast. Honor and thank Bast for crimini mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked crimini mushrooms per month, taking in account the season and local availability. Eat crimini mushrooms less often than other mushrooms.

Day 254: cane sugar

Unsulphured organic cane sugar is sacred to Bast. Honor and thank Bast for cane sugar.

Use unsulphured organic cane sugar as a sweetener. You may use unsulphured organic cane sugar, black strap molasses, local organic honey, pure maple syrup, and stevia as your regular daily sweeteners.

Unsulphured organic cane sugar is typically used as a sweetener.

Day 255: pine nut

Pine nuts are sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for pine nuts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of pine nuts per month, taking in account the season and local availability.

Pine nuts are also known as pinons.

Day 256: lentil sprouts

Lentil sprouts are sacred to Bast. Honor and thank Bast for lentil sprouts.

Eat at least one serving of lentil sprouts at least once a month, taking in account the season and local availability.

Toss lentil sprouts into salads. Stir-fry lentil sprouts with other vegetables. Blend lentil sprouts with vegetable juices. Stir lentil sprouts into soups or stews when serving (after cooking). Combine lentil sprouts in oat, barley, or buckwheat dishes. Puree lentil sprouts with dried peas or beans. Add lentil sprouts to baked beans. And, of course, eat them fresh and uncooked in a sprout salad.

Because lentil sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 257: coconut

Coconut is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for coconuts.

Eat at least one serving of coconut at least once a month, taking in account the season and local availability.

Day 258: pineapple

Pineapple is sacred to Bast. Honor and thank Bast for pineapples.

Eat at least one serving of pineapple per month, taking in account the season and local availability.

Pineapple is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Pineapple is recommended by the American Diabetes Association because it has a medium glycemic index (G.I.).

According to Ayurveda, pineapple is an excellent food for reducing Vata, especially in the fall.

Day 259: nori

Nori is sacred to Aset (Isis). Honor and thank Aset for nori.

Eat at least one serving of nori seaweed per month, taking in account the season and local availability.

Nori is also called sloke or laver.

You can grate nori on popcorn and eggs.

Day 260: maitake mushroom

Maitake mushroom is sacred to Bast. Honor and thank Bast for maitake mushrooms.

Another mushroom Goddess is Brigid (Celtic).

Eat at least one serving of cooked maitake mushrooms per week, taking in account the season and local availability. You may eat maitake mushrooms daily.

Grifola frondosa Maitake is Japanese for dancing mushroom, because those who found it often danced for joy. This mushroom was once worth its weight in silver.

There is a possibility that maitake mushrooms may help fight cancer.

Maitake mushrooms contain phytochemicals that enhance immune functions.

Day 261: dill seed

Dill seed is sacred to Bast and Djehuti. Honor and thank Bast and Djehuti for dill.

Eat dill seed at least once per week, taking in account the season and local availability. You may eat dill every day.

Eat dill seed on days associated with Mercury.

Dill goes well with bread, corn, fish, and potato.

Day 262: kale

Kale is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for kale.

Eat at least one serving of kale per month, taking in account the season and local availability.

Kale is a [cruciferous vegetable](#).

While kale is generally considered a garnish (and you can continue to use it that way), in the Goddess Diet Plan you include kale (cooked or raw) as a green leafy vegetable, such as in salads.

The American Diabetes Association recommends kale greens as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Kale is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Kale has vitamin D, an essential nutrient in fighting cancer.

Kale is an important source of dietary fiber.

Reason to choose organic:

Kale is the number nine (9) most important food to purchase organic because of the high level of chemical residues in non-organic kale, according to the 2010 study by the [Environmental Working Group](#).

Day 263: fenugreek sprouts

Fenugreek sprouts are sacred to Bast. Honor and thank Bast for fenugreek sprouts.

Eat at least one serving of fenugreek sprouts at least once a month, taking in account the season and local availability.

Combine fenugreek sprouts in oat, barley, or buckwheat dishes. And, of course, eat them fresh and uncooked in a sprout salad.

Because fenugreek sprouts are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 264: blackberries

Blackberries are sacred to Bast. Honor and thank Bast for blackberries.

Eat at least one serving of blackberries per month (daily during peak of fresh season), taking in account the season and local availability.

Eat at least one serving of fresh organic blackberries, blueberries, or raspberries per day, when locally in season.

Blackberries are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Blackberries are a good source of fiber.

Day 265: dulse

Dulse is sacred to Aset (Isis). Honor and thank Aset for dulse.

Eat at least one serving of dulse seaweed per month, taking in account the season and local availability.

Day 266: cardamom

Cardamom is sacred to Bast. Honor and thank Bast for cardamom.

Eat cardamom at least once per week. You may eat cardamom every day.

Cardamom is typically used as a spice or herb.

Cardamom is available in either brown cardamom or green cardamom.

Cardamom goes well with bread and fruit.

Day 267: rocket

Rocket is sacred to Bast. Honor and thank Bast for rocket.

Eat at least one serving of rocket at least once a month, taking in account the season and local availability.

Rocket is a green leafy vegetable, good raw in salads.

Day 268: raspberry

Raspberry is sacred to Bast. Honor and thank Bast for raspberries.

Eat at least one serving of raspberry per month, taking in account the season and local availability.

Eat at least one serving of fresh organic blackberries, blueberries, or raspberries per day, when locally in season.

Raspberries are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Raspberries a good source of fiber.

According to Ayurveda, raspberries are a good food for reducing Vata, especially in the fall.

Day 269: agar-agar

Agar-agar is sacred to Aset (Isis). Honor and thank Aset for agar-agar.

Eat at least one serving of agar-agar seaweed per month, taking in account the season and local availability.

Day 270: cumin

Cumin seeds are sacred to Bast. Honor and thank Bast for cumin.

Eat cumin at least twice per month. You may eat cumin every day.

Cumin seed is typically used as a spice or herb.

Cumin goes well with dried beans and bread.

Day 271: pomegranate

Pomegranate is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for pomegranate.

Eat at least one serving of pomegranates or drink a glass of pomegranate juice per week, taking in account the season and local availability. You may drink pomegranate juice almost

every day.

Eat pomegranate or drink pomegranate juice on days associated with Saturn.

According to Ayurveda, pomegranates are a good food for reducing Vata, especially in the fall.

Day 272: peanut

Peanut is sacred to Bast. Honor and thank Bast for peanuts.

Eat at least one serving of peanuts at least once a week, taking in account the season and local availability.. Eat some kind of nut every day. In addition to peanuts, also eat peanut butter.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Peanuts are a good prebiotic.

Day 273: string beans

String bean is sacred to Bast. Honor and thank Bast for string beans.

Eat at least one serving of string beans at least once a month, taking in account the season and local availability.

Day 274: plums

Plum is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for plums.

Eat at least one serving of plums per month, taking in account the season and local availability.

Plums are an acid-producing food (measured by the ash content resulting from laboratory titration).

Plums are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

According to Ayurveda, plums are a good food for reducing Vata, especially in the fall.

Day 275: rye

Rye, a grain, is sacred to Bast, Aset (Isis), Aset's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for rye.

Eat at least one serving of rye per month, taking in account the season and local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Persons with celiac disease (gluten-intolerant) should avoid wheat, rye, and barley.

Rye is an acid-producing food (measured by the ash content resulting from laboratory titration).

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Whole rye is a good prebiotic.

Day 276: Irish moss

Irish moss is sacred to Aset (Isis). Honor and thank Aset for Irish moss.

Eat at least one serving of Irish moss seaweed per month, taking in account the season and local availability.

Day 277: coriander

The coriander seed comes from the cilantro plant.

Coriander is sacred to Bast. Honor and thank Bast for coriander.

Eat coriander at least once per week, taking in account the season and local availability.

Coriander is typically used as a spice or herb.

Eat coriander on days associated with Mars.

Coriander goes well with bread, fruit, and potato.

Day 278: wheat grass

Wheat grass (or wheatgrass) is sacred to Bast, Aset (Isis), Aset's husband Asar, and Nepit's husband Neper. Honor and thank Bast, Aset, Asar, Nepit, and Neper for wheatgrass.

Wheatgrass is associated with the Year of the Dragon.

Eat at least one serving of wheat grass per month, taking in account the season and local availability.

Wheat grass is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 279: strawberry

Strawberry is sacred to Bast. Honor and thank Bast for strawberries.

Eat at least one serving of organic strawberries per month (daily during peak season), taking in account the season and local availability. Only eat organic strawberries.

The more colorful a strawberry is, the more antioxidants it has produced (as well as other phytonutrients that can help your body heal itself). These antioxidants help prevent cancer and help your body fight off any disease that is forming or has formed in your body.

A bright red strawberry is healthier than a pale red strawberry.

Strawberry is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Strawberries are recommended by the American Diabetes Association because they have a low glycemic index (low G.I.).

Strawberries have vitamin C, an essential nutrient in fighting cancer.

According to Ayurveda, strawberries are a good food for reducing Vata, especially in the fall.

Reason to choose organic:

Strawberries are the number three (3) most important food to purchase organic because of the high level of chemical residues in non-organic strawberries, according to the 2010 study by the [Environmental Working Group](#).

Day 280: Corsican seaweed

Corsican seaweed is sacred to Aset (Isis). Honor and thank Aset for Corsican seaweed.

Eat at least one serving of Corsican seaweed seaweed per month, taking in account the season and local availability.

Corsican seaweed is also known as makuri in Japan.

Day 281: allspice

Allspice is sacred to Bast. Honor and thank Bast for allspice.

Eat allspice at least twice per month. You may eat allspice every day.

Allspice is typically used as a spice or herb.

Allspice goes well with fruit.

Day 282: arugula

Arugula is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for arugula.

Eat at least one serving of arugula per month, taking in account the season and local availability.

The American Diabetes Association recommends arugula as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 283: pistachio nut

Pistachio nut is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for pistachio nut.

“The nut doesn't reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of pistachio nut at least once a week. Eat some kind of nut every day.

Day 284: currants

Currant is sacred to Bast. Honor and thank Bast for currants.

Eat at least two servings of currants at least once a month (at least one serving of red currant and at least one serving of black currant), taking in account the season and local availability.

Day 285: tofu

Tofu is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for tofu.

Eat at least one serving of tofu per month, taking in account the season and local availability.

Tofu is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Tofu is a good source of probiotics.

Day 286: sea palm

Sea Palm is sacred to Aset (Isis). Honor and thank Aset for sea palm.

Eat at least one serving of sea palm seaweed per month, taking in account the season and local availability.

Day 287: fennel seed

Fennel seed is sacred to Bast. Honor and thank Bast for fennel seed.

Eat fennel seed at least twice per month. You may eat fennel seed every day.

Fennel seed is typically used as a spice or herb.

Fennel goes well with fish.

Day 288: millet

Millet, a grain, is sacred to Bast and Renenutet. Honor and thank Bast and Renenutet for millet.

Eat at least one serving of millet per month, taking in account the season and local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Millet is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Millet has a high glycemic index (greater than 100%).

Day 289: tempeh

Tempeh is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for tempeh.

Eat at least one serving of tempeh per month, taking in account the season and local availability.

Tempeh is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Tempeh is a good source of probiotics.

Day 290: cashew

Cashew, a nut, is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for cashews.

“The nut doesn't reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of cashews per month, taking in account the season and local availability.

Day 291: barley grass

Barley grass (or barleygrass) is sacred to Bast, Aset (Isis), Aset's husband Asar, and Nepit. Honor and thank Bast, Aset, Asar, and Nepit for barleygrass.

Eat at least one serving of barley grass per month, taking in account the season and local

availability.

Day 292: kumquat

Kumquat is sacred to Bast. Honor and thank Bast for kumquats.

Eat at least one serving of kumquats at least once a month, taking in account the season and local availability.

Day 293: ocean ribbons

Ocean ribbons are sacred to Aset (Isis). Honor and thank Aset for ocena ribbons.

Eat at least one serving of ocean ribbons seaweed per month, taking in account the season and local availability.

Day 294: fenugreek

Fenugreek is sacred to Bast. Honor and thank Bast for fenugreek.

Eat fenugreek at least twice per month. You may eat fenugreek every day.

Fenugreek is typically used as a spice or herb.

Day 295: cod

Cod is sacred to Aset (Isis). Honor and thank Aset for cod.

Eat at least one serving of cod (particularly black cod or sablefish) per month, taking in account the season and local availability.

Cod should be wild caught, never farm raised.

If you do not currently eat fish and other seafood, do not start eating fish or seafood. The exception is that if you currently eat any mammals (including red or white meat) or birds, then add the recommended fish and seafood to your diet. If you currently eat fish or seafood, switch to the recommended fish and seafood.

If you eat fish, soak the fish in a mixture of apple cider vinegar and water before cooking. This will give the fish a sweeter taste and make the fish more tender.

Basil goes well with fish and shellfish.

Spices that go well with fish include .anise, basil, bay, cayenne, celery seed, chives, curry, dill, fennel, garlic, ginger, lemon peel, mustard, oregano, parsley, rosemary, thyme, saffron, sage, savory, tarragon, and marjoram.

Day 296: squash seeds

Squash seeds are sacred to Bast. Honor and thank Bast for squash seeds.

Eat at least one serving of squash seeds per month, taking in account the season and local availability.

Day 297: chia seeds

Chia seeds, a grain, are sacred to Bast and Renenutet. Honor and thank Bast and Renenutet for chia seeds.

Eat chia seeds at least once a month, taking in account the season and local availability.

Chia is a grain from Mexico. In America it is best known from the television ads for Chia Pets.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Chia seeds are a flavorless source of fiber, with more fiber per gram than any other whole food.

During times when you need more fiber, consider eating a tablespoon or two of chia seeds a day. Make sure to take with plenty of liquids. Chia seeds can be added to salads, smoothies, or nut butter sandwiches. Because chia seeds have a soft seed coat, you do not need to grind them before eating.

One or two tablespoons of chia seed and plenty of water can be useful if you have constipation.

Day 298: rapini or broccoli rabe

Rapini or broccoli rabe is sacred to Bast. Honor and thank Bast for rapini.

Eat at least one serving of rapini at least once a month, taking in account the season and local availability.

Rapini is also known as broccoli rabe, broccoli raap, broccoli raab, broccoletti, broccoli di rape, cime di rapa, rape, rappi, or friarielli.

Day 299: pecan

Pecans, a nut, are sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for pecans.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of pecans at least once a week. Eat some kind of nut every day.

Day 300: spirulina

Spirulina is sacred to Aset (Isis). Honor and thank Aset for spirulina.

Eat at least one serving of spirulina at least once a week, taking in account the season and local availability. You may eat spirulina every day.

Day 301: vanilla

Vanilla is sacred to Bast. Honor and thank Bast for vanilla.

Eat vanilla at least once per month. You may eat vanilla every day.

Vanilla is typically used as a spice or herb.

Day 302: maca powder

Maca is sacred to Bast. Honor and thank Bast for maca root and maca powder.

Eat at least one serving of maca powder (made from the maca root of Peru) at least once a month, taking in account the season and local availability.

Day 303: filberts

Filberts, a nut, are sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for filberts.

“The nut doesn’t reveal the tree it contains.” —Proverb of the Inner Temple of ancient Egypt

Eat at least one serving of filberts at least once a week. Eat some kind of nut every day.

Day 304: chlorella

Chlorella is sacred to Aset (Isis). Honor and thank Aset for chlorella.

Eat at least one serving of chlorella at least once a week, taking in account the season and local availability. You may eat chlorella every day.

Day 305: sugar snap peas

Sugar snap peas are sacred to Bast, Aset (Isis), and Aset’s husband Asar. Honor and thank Bast, Aset, and Asar for sugar snap peas.

Peas are associated with the Year of the Rat.

Eat at least one serving of sugar snap peas per month, taking in account the season and local availability.

The American Diabetes Association recommends sugar snap peas as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 306: kidney beans

Kidney beans are sacred to Bast. Honor and thank Bast for kidney beans.

Eat at least one serving of kidney beans at least twice per month, taking in account the season and local availability.

Kidney beans are an acid-producing food (measured by the ash content resulting from laboratory titration).

Day 307: Brussels sprouts

Brussels sprouts are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Brussels sprouts.

Eat at least one serving of Brussels sprouts per month, taking in account the season and local availability.

Brussels sprouts are a [cruciferous vegetable](#).

The American Diabetes Association recommends Brussels sprouts as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Brussels sprouts are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Brussels sprouts have indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Day 308: umeboshi plums

Umeboshi plums are sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for umeboshi plums.

Eat at least one serving of umeboshi plums at least once a month.

Day 309: cauliflower

Cauliflower is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for cauliflower.

Eat at least one serving of cauliflower per month, taking in account the season and local availability.

Cauliflower is a [cruciferous vegetable](#).

Cauliflower, a white vegetable, is an interesting exception to the general rule that the more colorful a plant, the more nutritious it is, because cauliflower is actually a very nutritious vegetable.

The American Diabetes Association recommends cauliflower as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Cauliflower is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Cauliflower has indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Cauliflower has vitamin C, an essential nutrient in fighting cancer.

Day 310: saffron

Saffron is sacred to Bast. Honor and thank Bast for saffron.

Eat saffron at least once per month. You may eat saffron every day.

Saffron is typically used as a spice or herb.

Saffron goes well with bread and fish.

Day 311: collard

Collard is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for collard.

Eat at least one serving of collard greens per month, taking in account the season and local availability.

The American Diabetes Association recommends collard greens as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Collard greens have vitamin D, an essential nutrient in fighting cancer.

Collard greens are an important source of dietary fiber.

Day 312: scallions

Scallion is sacred to Bast. Honor and thank Bast for scallions.

Eat at least one serving of scallions at least once a month, taking in account the season and local availability.

Day 313: shallot

Shallot is sacred to Bast. Honor and thank Bast for shallots.

Eat at least one serving of shallots at least once a month, taking in account the season and local availability.

Day 314: guava

Guava is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for guava.

Eat at least one serving of guavas per month, taking in account the season and local availability. Strawberry guava is particularly beneficial.

Guavas have vitamin C, an essential nutrient in fighting cancer.

Day 315: Swiss chard

Swiss chard is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Swiss chard.

Eat at least one serving of Swiss chard per month, taking in account the season and local availability.

The American Diabetes Association recommends Swiss chard as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 316: bulghar wheat or bulgur wheat

Bulghar wheat or bulgur wheat, a grain, is sacred to Bast, Aset, Aste's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for bulghar wheat.

Eat at least one serving of bulgur wheat at least once a month, taking in account the season and local availability.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the

enemies of Heru Sa Aset (Horus).

Day 317: tarragon

Tarragon is sacred to Bast. Honor and thank Bast for tarragon.

Eat tarragon at least once per month. You may eat tarragon every day.

Tarragon is typically used as a spice or herb.

Tarragon is sometimes called “little dragon”.

Tarragon goes well with chicken eggs, fish, and potato.

Day 318: edamame

Edamame is sacred to Bast. Honor and thank Bast for edamame.

Eat at least one serving of edamame at least once a month, taking in account the season and local availability.

Day 319: dandelion greens

Dandelion greens are sacred to Bast. Honor and thank Bast for dandelion greens.

Eat at least one serving of dandelion greens at least once a month, taking in account the season and local availability.

Day 320: triticale

Triticale, a grain, is sacred to Bast, Aset, Aset's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for triticale.

Eat at least one serving of triticale at least once a month, taking in account the season and local availability.

Triticale is a grain.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Day 321: butternut squash

Butternut squash is sacred to Bast. Honor and thank Bast for butternut squash.

Eat at least one serving of butternut squash at least once a month, taking in account the season and local availability.

Day 322: endive

Endive is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for endive.

Eat at least one serving of endive per month, taking in account the season and local availability.

The American Diabetes Association recommends endive as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Endive is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Endive has vitamin D, an essential nutrient in fighting cancer.

Day 323: jicama

Jicama is sacred to Bast. Honor and thank Bast for jicama.

Eat at least one serving of jicama per month, taking in account the season and local availability. You may eat jicama every day.

The American Diabetes Association recommends jicama as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Jicama is a good source of fiber.

Day 324: fennel

Fennel is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for fennel.

Eat at least one serving of fennel per month, taking in account the season and local availability.

Eat fennel on days associated with Mercury.

Fennel is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 325: cereal grasses

Cereal grasses are sacred to Bast. Honor and thank Bast for cereal grass.

Eat at least two servings of cereal grass at least once a week, taking in account the season and local availability.

The most famous cereal grasses are wheatgrass and barleygrass, which have separate listings. While both wheatgrass and barleygrass count for the cereal grass requirement, the cereal grass requirement also includes eating a variety of other cereal grasses.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Day 326: kamut or Khorasan wheat

Kamut (also known as Khorasan wheat), a grain, is sacred to Bast and Renenutet. Honor and thank Bast and Renenutet for kamut.

Eat at least one serving of kamut at least once a month, taking in account the season and local availability.

Kamut is a grain.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Day 327: mangoes

Mango is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for mangoes.

In late October decorate the entrance of your home with fresh mango leaves to invite in Goddess.

Eat at least one serving of mango per month, taking in account the season and local availability.

Mangoes are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Mango is recommended by the American Diabetes Association because it has a low glycemic index (low G.I.).

Mangoes have vitamin A and carotenes, essential nutrients in fighting cancer.

According to Ayurveda, mango is an excellent food for reducing Vata, especially in the fall.

Day 328: kohlrabi

Kohlrabi is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for kohlrabi.

Eat at least one serving of kohlrabi per month, taking in account the season and local availability.

The American Diabetes Association recommends kohlrabi as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 329: rutabaga

Rutabaga is sacred to Bast. Honor and thank Bast for rutabaga.

Eat at least one serving of rutabaga per month, taking in account the season and local availability.

The American Diabetes Association recommends rutabaga as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 330: lemon verbena

Lemon verbena is sacred to Bast. Honor and thank Bast for lemon verbena.

Eat lemon verbena at least once per month. You may eat lemon verbena every day.

Lemon verbena is typically used as a spice or herb.

Day 331: crisp breads

Crsip breads are sacred to Bast, Aset, and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for crispbread.

Bread is associated with the Year of the Tiger.

Eat at least one serving of crispbread at least once a month, taking in account the season and local availability.

Day 332: okra

Okra is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for okra.

Eat at least one serving of okra per month, taking in account the season and local availability.

The American Diabetes Association recommends okra as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Okra is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 333: Jerusalem artichoke

Jerusalem artichoke is sacred to Bast. Honor and thank Bast for Jerusalem artichokes.

Eat at least one serving of Jerusalem artichoke at least once a month, taking in account the season and local availability.

Probiotics require prebiotics (including oligosaccharides, inulin, and phenols) to effectively work. Jerusalem artichoke is a good prebiotic.

Day 334: purslane

Purslane is sacred to Bast. Honor and thank Bast for purslane.

Eat at least one serving of purslane at least once a month, taking in account the season and local availability. You may eat purslane every day.

Day 335: watercress

Watercress is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for watercress.

Eat at least one serving of watercress per month, taking in account the season and local availability.

The American Diabetes Association recommends watercress as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Watercress is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Watercress has indole-3-carbinol, glucosinolates, and vitamin C that help prevent cancer by enhancing detoxification, protecting DNA, and inhibiting tumor formation.

Day 336: snow peas

Snow peas are sacred to Bast. Honor and thank Bast for snow peas.

Peas are associated with the Year of the Rat.

Eat at least one serving of snow peas at least once a month, taking in account the season and local availability.

Day 337: bitter melon

Bitter melon is sacred to Bast. Honor and thank Bast for bitter melon.

Eat at least one serving of bitter melon at least once a month, taking in account the season and local availability.

Day 338: microalgae

Microalgae is sacred to Bast. Honor and thank Bast for microalgae.

Eat at least one serving of microalgae at least once a month, taking in account the season and local availability.

Day 339: natto

Natto is sacred to Bast. Honor and thank Bast for natto.

Eat at least one serving of natto at least once a month, taking in account the season and local availability.

Day 340: persimmon

Persimmon is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for persimmons.

Eat at least one serving of persimmon per month, taking in account the season and local availability.

According to Ayurveda, persimmons are a good food for reducing Vata, especially in the fall.

Day 341: quince

Quince is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for quince.

Eat at least one serving of quince at least once a month, taking in account the season and local availability.

Day 342: kimchi

Kimchi is sacred to Bast. Honor and thank Bast for kimchi.

Cabbage is associated with the Year of the Rat.

Eat at least one serving of kimchi at least once a month, taking in account the season and local availability. You may eat a little kimchi daily.

Sauerkraut and kimchi are forms of fermented cabbage.

Sauerkraut is Germanic origin, while kimchi is of Korean origin. You may for cultural reasons eat kimchi at least once a week and eat sauerkraut only once every other week.

Day 343: star fruit

Star fruit is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for star fruit.

Eat at least one serving of star fruit at least once a month, taking in account the season and local availability.

Day 344: canola oil

Canola oil is sacred to Bast. Honor and thank Bast for canola oil.

Use cold-pressed canola oil as an occasional cooking oil. Keep canola oil refrigerated to prevent rancidity.

Canola oil is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 345: carob

Carob is sacred to Bast. Honor and thank Bast for carob.

Eat at least one serving of carob per month, taking in account the season and local availability.

Carob is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 346: cucumber

Cucumber is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for cucumber.

Eat at least one serving of organic cucumber per month, taking in account the season and local availability.

The American Diabetes Association recommends cucumber as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Cucumber is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 347: lettuce

Lettuce is sacred to Bast, Aset (Isis), Aset's husband Asar, Min, and Unnefer. Honor and thank Bast, Aset, Asar, Min, and Unnefer for lettuce.

Eat at least two servings of lettuce per month, taking in account the season and local availability.

The preferred forms of lettuce are Romaine lettuce and red leaf lettuce.

The ancient Egyptians used wild lettuce for medical purposes.

The American Diabetes Association recommends lettuce and Romaine as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Lettuce is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 348: parsnips

Parsnips are sacred to Bast. Honor and thank Bast for parsnips.

Eat at least one serving of parsnips per month, taking in account the season and local availability.

The American Diabetes Association recommends parsnip as a starchy vegetable.

Parsnips are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Parsnips have a high glycemic index (between 80% and 100%).

Day 349: sorrel

Sorrel is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for sorrel.

Eat at least one serving of sorrel per month, taking in account the season and local availability. You may eat sorrel every day.

Sorrel is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 350: sweet corn

Corn is sacred to Nepit. Honor and thank Nepit for sweet corn.

Eat at least one serving of sweet corn per month, taking in account the season and local availability. Do *not* eat genetically modified (GMO) corn.

The American Diabetes Association recommends baby corn as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

The American Diabetes Association recommends corn as a starchy vegetable.

Corn is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Corn flakes have a high glycemic index (greater than 100%). Corn has a high glycemic index (between 80% and 100%).

Spices that go well with corn include .chili, curry, dill, marjoram, parsley, savory, and thyme.

Day 351: tamarind

Tamarind is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for tamarind.

Eat at least one serving of tamarind per month, taking in account the season and local availability.

Tamarind is an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 352: lima beans

Lima beans are sacred to Bast. Honor and thank Bast for lima beans.

Eat at least one serving of lima beans per month, taking in account the season and local availability.

The American Diabetes Association recommends lima beans as a protein source.

Lima beans are an acid-producing food (measured by the ash content resulting from laboratory titration).

Day 353: tortillas

Tortillas are sacred to Bast, Nepit, and Aset (Isis). Honor and thank Bast, Nepit, and Aset for tortillas.

Eat at least one serving of tortillas per month, taking in account the season and local availability.

Tortillas are an acid-producing food (measured by the ash content resulting from laboratory titration).

Day 354: zucchini

Zucchini is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for zucchinis.

Eat at least one serving of zucchini (Italian squash) per month during hot weather, taking in account the season and local availability.

The American Diabetes Association recommends zucchini as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Zucchini is an acid-producing food (measured by the ash content resulting from laboratory titration).

Day 355: black bean

Black bean is sacred to Bast. Honor and thank Bast for black beans.

Eat at least one serving of black bean at least twice per month, taking in account the season and local availability.

The American Diabetes Association recommends black beans as a protein source.

Day 356: black-eyed peas

Black-eyed peas sacred to Bast. Honor and thank Bast for black-eyed peas.

Eat at least one serving of black eyed pea at least twice per month, taking in account the season and local availability.

The American Diabetes Association recommends black-eyed peas as a protein source.

Day 357: baby bok choy

Baby bok choy is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for baby bok choy.

Eat at least one serving of baby bok choy per month, taking in account the season and local availability.

Day 358: red palm oil

Red palm oil is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for red palm oil.

Eat at least one serving of red palm oil at least once a month. Keep red palm oil refrigerated to prevent rancidity.

Day 359: angelica

Angelica is sacred to Bast. Honor and thank Bast for angelica.

Scientific and botanical name: *Angelica archangelica*

Eat angelica at least once per month. You may eat angelica every day.

Angelica is typically used as a spice or herb.

Angelica is an edible flower. Consider using angelica in salads and as a garnish. Angelica has a flavor similar to celery and is good with fish. Angelica stems are popular candied.

Angelica is a skin allergen to some humans (as distinguished from corporations as supposedly illegal persons). I do not know the effect of angelica on the skin of corporations and I strongly believe that they are fictional persons who don't actually exist and that only insane lawyers and government officials believe that corporations are actual persons. Both humans and corporations should not eat angelica if they have an allergy to angelica.

Day 360: elderberries

Elderberry is sacred to Bast and Bes. Honor and thank Bast and Bes for elderberries.

Eat at least one serving of elder berries at least once a month, taking in account the season and local availability.

The ancient Egyptians used elderberries for medical purposes.

Day 361: ajowan

Ajowan is sacred to Bast. Honor and thank Bast for ajowan.

Eat ajowan at least once per month. You may eat ajowan every day.

Ajowan is typically used as a spice or herb.

Day 362: macadamia oil

Macadamia oil is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for macadamia oil.

Use macadamia oil as an occasional cooking oil. Keep macadamia oil refrigerated to prevent rancidity.

Day 363: coconut milk

Coconut milk is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for coconut milk.

Drink at least one serving of coconut milk at least once a week, taking in account the season

and local availability.

Day 364: bamboo shoots

Bamboo shoots are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for bamboo shoots.

Eat at least one serving of bamboo shoots per month, taking in account the season and local availability.

The American Diabetes Association recommends bamboo shoots as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Because bamboo shoots are a high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 365: anise hyssop

Anise hyssop is sacred to Bast. Honor and thank Bast for anise hyssop.

Scientific and botanical name: *Agastache foeniculum*

Eat at least one serving of anise hyssop at least once a month, taking in account the season and local availability.

Anise hyssop is an edible flower. Consider using anise hyssop in salads and as a garnish. Anise hyssop is sweet and has a flavor similar to anise or licorice.

Day 366: gooseberry

Gooseberry is sacred to Bast. Honor and thank Bast for gooseberries.

Eat at least one serving of gooseberries per month, taking in account the season and local availability.

Day 367: walnut oil

Walnut oil is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and

thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for walnut oil.

Eat at least one serving of walnut oil at least once a month. Keep walnut oil refrigerated to prevent rancidity.

Walnut oil is too fragile for cooking. The oil's delicate omega-3 essential fatty acids will oxidize under exposure to heat, air, or light. Use for salad dressings, drizzles on prepared foods, herbal/seasoned oil dips, and similar cold oil uses.

Walnut oil has a full rich flavor.

Day 368: akudjura

Akudhura is sacred to Bast. Honor and thank Bast for akudjura.

Eat akudjura at least once per month. You may eat akudjura every day.

Akudhura is typically used as a spice or herb.

Day 369: wax beans

Wax beans are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for wax beans.

Eat at least one serving of wax beans per month, taking in account the season and local availability.

The American Diabetes Association recommends wax beans as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 370: apple flower

Apple flower is sacred to Bast. Honor and thank Bast for apple flower.

Scientific and botanical name: *Malus* Spp.

Eat at least one serving of apple flower at least once a month, taking in account the season and local availability. Eat apple flower in moderation because it may contain precursors of cyanide.

Apple flower is an edible flower. Consider using apple flower in salads and as a garnish. Apple flower has a delicate floral flavor.

Day 371: sesame oil

Sesame oil is sacred to Bast. Honor and thank Bast for sesame oil.

Use sesame oil as a regular cooking oil. Sesame oil can be used for high temperature cooking. Keep sesame seed oil refrigerated to prevent rancidity.

Use dark roasted hazelnut oil as a flavoring in soup or stir-fries.

Day 372: alexanders

Alexanders is sacred to Bast. Honor and thank Bast for alexanders.

Eat alexanders at least once per month. You may eat alexanders every day.

Alexanders is typically used as a spice or herb.

Day 373: Italian beans

Italian beans are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Italian beans.

Eat at least one serving of Italian beans per month, taking in account the season and local availability.

The American Diabetes Association recommends Italian beans as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 374: Arabian jasmine

Arabian jasmine is sacred to Bast. Honor and thank Bast for Arabian jasmine.

Scientific and botanical name: *Jasminum sambac*

Eat at least one serving of Arabian jasmine at least once a month, taking in account the season and local availability.

Arabian jasmine is an edible flower. Consider using Arabian jasmine in salads and as a garnish. Used for jasmine tea.

Day 375: avocado oil

Avocado oil is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for avocado oil.

Eat at least one serving of avocado oil at least once a month. Keep avocado oil refrigerated to prevent rancidity. Do not heat or cook with avocado oil.

Avocado oil has a full rich flavor.

Day 376: amchur

Amchur is sacred to Bast. Honor and thank Bast for amchur.

Eat amchur at least once per month. You may eat amchur every day.

Amchur is typically used as a spice or herb.

Day 377: Chinese cabbage

Chinese cabbage is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Chinese cabbage.

Chinese cabbage is associated with the Year of the Rat.

Eat at least one serving of Chinese cabbage per month, taking in account the season and local availability.

The American Diabetes Association recommends Chinese cabbage as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Because Chinese cabbage is a high fiber food, it can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 378: arugula flower

Arugula flower is sacred to Bast. Honor and thank Bast for arugula flower.

Scientific and botanical name: *Eruca vesicaria*

Eat at least one serving of arugula flower at least once a month, taking in account the season and local availability.

Arugula flower is an edible flower. Consider using arugula flower in salads and as a garnish. Arugula flower has a nutty, spicy, peppery flavor.

Day 379: anise

Anise was sacred to Bast and Seshat (Sothis). Honor and thank Bast and Seshat for anise.

Eat anise at least once per month. You may eat anise every day.

Anise is typically used as a spice or herb.

Anise goes well with bread, fish, and fruit.

Day 380: peanut oil

Peanut oil is sacred to Bast. Honor and thank Bast for peanut oil.

Use peanut oil as an occasional cooking oil. Keep peanut oil refrigerated to prevent rancidity.

Note that peanut oil imparts a strong penut flavor, best used for Asian meals.

Day 381: chayote

Chayote is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for chayote.

Eat at least one serving of chayote per month, taking in account the season and local availability.

The American Diabetes Association recommends chayote as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 382: basil flower

Basil flower is sacred to Bast. Honor and thank Bast for basil flower.

Scientific and botanical name: *Ocimum basilicum*

Eat at least one serving of basil flower at least once a month, taking in account the season and local availability.

Basil flower is an edible flower. Consider using basil flower in salads and as a garnish. The basil flower has a similar taste to the basil leaf, but milder.

Day 383: annatto

Annatto seed is sacred to Bast. Honor and thank Bast for annatto.

Eat annatto at least once per month. You may eat annatto every day.

Annatto is typically used as a spice or herb.

Day 384: daikon

Daikon is sacred to Bast. Honor and thank Bast for daikon root and greens.

Eat at least one serving of daikon greens per month and at least one serving of daikon root per month, taking in account the season and local availability.

The American Diabetes Association recommends daikon as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Daikon greens have vitamin D, an essential nutrient in fighting cancer.

Day 385: bee balm

Bee balm is sacred to Bast. Honor and thank Bast for bee balm.

Scientific and botanical name: *Monarda* Spp.

Eat at least one serving of bee balm at least once a month, taking in account the season and local availability.

Bee balm is an edible flower. Consider using bee balm in salads and as a garnish.

Bee balm is used to make tea. Bee balm tea tastes similar to Earl Gray tea and may be used in the place of bergamot tea.

Day 386: asa foetida or asafetida

Asa foetida (or asafetida) is sacred to Bast. Honor and thank Bast for asafetida.

Eat asafetida at least once per month. You may eat asafetida every day.

Asa foetida is typically used as a spice or herb.

Day 387: mustard greens

Mustard greens are sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for mustard greens.

Eat at least one serving of mustard greens per month, taking in account the season and local availability.

The American Diabetes Association recommends mustard greens as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Mustard greens have vitamin D, an essential nutrient in fighting cancer.

Mustard greens are an important source of dietary fiber.

Day 388: borage

Borage is sacred to Bast. Honor and thank Bast for borage.

Scientific and botanical name: *Borago officinalis*

Eat borage at least once per month. You may eat borage every day.

Borage leaf is typically used as a spice or herb.

Borage flower is an edible flower. Consider using borage in salads and as a garnish. Borage flower has a taste similar to cucumber.

Day 389: barberry

Barberry is sacred to Bast. Honor and thank Bast for barberry.

Eat barberry at least once per month. You may eat barberry every day.

Barberry is typically used as a spice or herb.

Day 390: heart of palm

Heart of palm is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for heart of palm.

Eat at least one serving of heart of palm per month, taking in account the season and local availability.

The American Diabetes Association recommends heart of palm as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 391: burnet

Burnet is sacred to Bast. Honor and thank Bast for burnet.

Scientific and botanical name: *Sanguisorba minor*

Eat at least one serving of burnet at least once a month, taking in account the season and local availability.

Burnet is an edible flower. Consider using burnet in salads and as a garnish. Burnet has a very mild, faint cucumber taste.

Day 392: bay leaf

Bay leaf is sacred to Bast. Honor and thank Bast for bay leaf.

Eat bay leaf at least once per month. You may eat bay leaf every day.

Bay leaf is typically used as a spice or herb.

Bay leaf goes well with beans and soups. Bay goes well with fish.

Day 393: escarole

Escarole is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for escarole.

Eat at least one serving of escarole per month, taking in account the season and local availability.

The American Diabetes Association recommends escarole as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Escarole has vitamin D, an essential nutrient in fighting cancer.

Day 394: calendula

Calendula flower is sacred to Bast. Honor and thank Bast for calendula.

Scientific and botanical name: *Calendula officinalis*

Eat at least one serving of calendula flower at least once a month, taking in account the season and local availability.

Calendula flower is an edible flower. Consider using calendula flower in salads and as a garnish. Calendula flower has a flavor similar to saffron and adds a golden hue to food.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or touch composite flowers.

Day 395: bear's garlic

Bear's garlic is sacred to Bast. Honor and thank Bast for bear's garlic.

Eat bear's garlic at least once per month. You may eat bear's garlic every day.

Bear's garlic is typically used as a spice or herb.

Day 396: radicchio

Radicchio is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for radicchios.

Eat at least one serving of radicchio per month, taking in account the season and local availability.

The American Diabetes Association recommends radicchio as a non-starchy vegetable.

Diabetics are encouraged to eat lots of non-starchy vegetables.

Day 397: carnation

Carnation is sacred to Bast. Honor and thank Bast for carnation.

Scientific and botanical name: *Dianthus caryophyllus*

Eat at least one serving of carnation at least once a month, taking in account the season and local availability.

Carnation is an edible flower. Consider using carnation in salads and as a garnish. Carnation flower has a peppery, clove-like flavor.

Day 398: bergamot

Bergamot is sacred to Bast. Honor and thank Bast for bergamot.

Eat bergamot at least once per month. You may eat bergamot every day.

Bergamot is typically used as a spice or herb.

Day 399: water chestnuts

Water chestnut is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for water chestnuts.

Eat at least one serving of water chestnuts per month, taking in account the season and local availability.

The American Diabetes Association recommends water chestnuts as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Because water-chestnuts are high fiber food, they can distend the stomach, giving an artificial feeling of being full. An hour later, you may feel hungry again, even though you've eaten enough food. Eating your food slowly and balancing high fiber foods with protein and fat will solve this "Chinese food syndrome".

Day 400: garden chives flowers

Garden chive flower is sacred to Bast. Honor and thank Bast for chives.

Scientific and botanical name: *Allium schoenoprasum*

Eat at least one serving of garden chives flowers at least once a month, taking in account the season and local availability.

Garden chives flower is an edible flower. Consider using garden chives flowers in salads and as a garnish. Garden chive flowers have a mild onion flavor.

Day 401: black cardamom

Black cardamom is sacred to Bast. Honor and thank Bast for black cardamom.

Eat black cardamom at least once per month. You may eat black cardamom every day.

Black cardamom is typically used as a spice or herb.

Day 402: plantain

Plantain is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for plantains.

Eat at least one serving of plantain per month, taking in account the season and local availability.

The American Diabetes Association recommends plantain as a starchy vegetable.

Day 403: garlic chives flowers

Garlic chive flower is sacred to Bast. Honor and thank Bast for chives.

Scientific and botanical name: *Allium tuberosum*

Eat at least one serving of garlic chives flowers at least once a month, taking in account the season and local availability.

Garlic chive is an edible flower. Consider using garlic chives flowers in salads and as a garnish. Garlic chive flowers have a garlic taste.

Day 404: black cohosh

Black cohosh is sacred to Bast. Honor and thank Bast for black cohosh.

Black cohosh should be taken during PMS and menstrual cramping.

Day 405: celeriac

Celeriac is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for celeriac.

Eat at least one serving of celeriac per month, taking in account the season and local availability.

Day 406: garland chrysanthemum

Garland chrysanthemum is sacred to Bast. Honor and thank Bast for chrysanthemum.

Scientific and botanical name: *Chrysanthemum coronarium*

Eat at least one serving of garland chrysanthemum at least once a month, taking in account the season and local availability.

Chrysanthemum is an edible flower. Consider using chrysanthemum in salads and as a garnish. Chrysanthemum has a pungent, bitter taste.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or touch composite flowers.

Day 407: black cumin

Black cumin is sacred to Bast. Honor and thank Bast for black cumin.

Eat black cumin at least once per month. You may eat black cumin every day.

Black cumin is typically used as a spice or herb.

Day 408: mung beans

Mung beans is sacred to Bast. Honor and thank Bast for mung beans.

Eat at least one serving of mung beans per month, taking in account the season and local availability.

Mung beans are a food that helps nourish the kidneys.

Mung beans are a food that increases sexual energy and enhances fertility.

botanical information:

Botanical name: *Vigna radiata*; Obsolete names: *Phaseolus aureus* and *Phaseolus radiatus*

Common name: mung bean

Family: Fabaceae (bean)

origin:

Origin: Bangladesh, India, and Pakistan

nutritional information:

The American Diabetes Association recommends bean sprouts as a non-starchy vegetable. Diabetics are encouraged to eat lots of non-starchy vegetables.

Mung bean sprouts are an alkaline-producing food (measured by the ash content resulting from laboratory titration).

Day 409: clover

Clover is sacred to Bast. Honor and thank Bast for clover.

Scientific and botanical name: *Trifolium* Spp.

Eat at least one serving of clover at least once a month, taking in account the season and local availability.

Clover is an edible flower. Consider using clover in salads and as a garnish. The raw flowerheads can be difficult to digest.

Day 410: black lime

Black lime is sacred to Bast. Honor and thank Bast for black lime.

Eat black lime at least once per month. You may eat black lime every day.

Black lime is typically used as a spice or herb.

Day 411: navy beans

Navy beans are sacred to Bast. Honor and thank Bast for navy beans.

Eat at least one serving of navy beans at least once a month, taking in account the season and local availability.

Day 412: cornflower

Cornflower (also known as bachelor's buttons) is sacred to Bast. Honor and thank Bast for cornflower.

Scientific and botanical name: *Centaurea cynaus*

Eat at least one serving of cornflower at least once a month, taking in account the season and local availability.

Cornflower is an edible flower. Consider using cornflower in salads and as a garnish. Range of taste from sweet to a spicy, clove-like flavor.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or touch composite flowers.

Day 413: black mustard

Black mustard is sacred to Bast. Honor and thank Bast for black mustard.

Eat black mustard at least once per month. You may eat black mustard every day.

Black mustard is typically used as a spice or herb.

Day 414: sachu inchi seed

Sacha inchi seed is sacred to Bast. Honor and thank Bast for sacha inchi seeds.

Eat at least one serving of sacha inchi seed at least once a month, taking in account the season and local availability.

Sacha inchi seed looks and tastes much like nuts and contains five grams of fiber, five to eight grams pf protein, and 13 times more omega-3 essential fatty acids per serving than wild salmon.

Day 415: dandelion flower

Dandelion flower is sacred to Bast. Honor and thank Bast for dandelion flower.

Scientific and botanical name: *Taraxacum officinalis*

Eat at least one serving of dandelion flower at least once a month, taking in account the season and local availability.

Dandelion flower is an edible flower. Consider using dandelion flower in salads and as a garnish. Young dandelion buds have a taste similar to mushrooms when cooked. Dandelion flower can be used to make dandelion wine.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or touch composite flowers.

Day 416: blue fenugreek

Blue fenugreek is sacred to Bast. Honor and thank Bast for blue fenugreek.

Eat blue fenugreek at least once per month. You may eat blue fenugreek every day.

Blue fenugreek is typically used as a spice or herb.

Day 417: tatsoi

Tatsoi (also known as spinach mustard, spoon mustard, or rosette bok choy) is sacred to Bast. Honor and thank Bast for tatsoi.

Eat at least one serving of tatsoi at least once a month, taking in account the season and local availability.

Day 418: day lily

Day lily is sacred to Bast. Honor and thank Bast for day lily.

Scientific and botanical name: *Hemerocallis* Spp.

Eat at least one serving of day lily at least once a month, taking in account the season and local availability.

Day lily is an edible flower. Consider using day lily in salads and as a garnish. Day lily has a sweet, crunchy flavor, somewhat similar to chestnuts and lettuce. Note that most true lilies (*Lillium* Spp.) contain alkaloids and are *not* edible. Day lillies might have a laxative effect on some human persons. Not all human persons have the rights of legal persons such as a corporation. The U.S. Supreme Court, in its most famous decision, *Dred Scott v. Sandford*, 60 U.S. 393 (1857), ruled that Black African-Americans are “beings of an inferior order, and altogether unfit to associate with the white race, either in social or political relations, and so far inferior that they had no rights which the white man was bound to respect.”

Day 419: boldo

Boldo is sacred to Bast. Honor and thank Bast for boldo.

Eat boldo at least once per month. You may eat boldo every day.

Boldo is typically used as a spice or herb.

Day 420: mizunz

Mizunz (also known as xiu cai, kyona, Japanese mustard, potherb mustard, Japanese greens, California peppergrass, or spider mustard) is sacred to Bast. Honor and thank Bast for mizunz.

Eat at least one serving of mizunz at least once a month, taking in account the season and local availability.

Day 421: dill flower

Dill flower is sacred to Bast. Honor and thank Bast for dill.

Scientific and botanical name: *Anthum graveolens*

Eat at least one serving of dill flower at least once a month, taking in account the season and

local availability.

Dill flower is an edible flower. Consider using dill flower in salads and as a garnish.

Day 422: Buddha's hand

Buddha's hand is sacred to Bast. Honor and thank Bast for Buddha's hand.

Eat Buddha's hand at least once per month. You may eat Buddha's hand often.

Buddha's hand is a fruit with no flesh, only peel and pith, that is typically used as a spice or herb.

In addition to use in citron candy making, you can mince Buddha's hand and sauté in olive oil with shallots to sprinkle over fish or vegetables.

Day 423: huckleberry

Huckleberry is sacred to Bast. Honor and thank Bast for huckleberries.

Eat at least one serving of huckleberries per month, taking in account the season and local availability.

Day 424: English daisy

English daisy is sacred to Bast. Honor and thank Bast for English daisy.

Scientific and botanical name: *Bellis perennis*

Eat at least one serving of English daisy at least once a month, taking in account the season and local availability.

English daisy is an edible flower. Consider using English daisy in salads and as a garnish. English daisy has a tangy flavor.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or touch composite flowers.

Day 425: calamus

Calamus is sacred to Bast. Honor and thank Bast for calamus.

Eat calamus at least once per month. You may eat calamus every day.

Calamus is typically used as a spice or herb.

Day 426: loganberry

Loganberry is sacred to Bast. Honor and thank Bast for loganberries.

Eat at least one serving of loganberries per month, taking in account the season and local availability.

Day 427: fennel flower

Fennel flower is sacred to Bast. Honor and thank Bast for fennel flower.

Scientific and botanical name: *Foeniculum vulgare*

Eat at least one serving of fennel flower at least once a month, taking in account the season and local availability.

Fennel flower is an edible flower. Consider using fennel flower in salads and as a garnish. Fennel flower has a sweet, licorice flavor

Day 428: candlenut

Candlenut is sacred to Bast. Honor and thank Bast for candlenut.

Eat candlenut at least once per month. You may eat candlenut every day.

Candlenut is typically used as a spice or herb.

Day 429: yam

Yam is sacred to Bast. Honor and thank Bast for yam.

Eat at least one serving of yam at least once a month, taking in account the season and local availability.

Day 430: fuchsia

Fuchsia is sacred to Bast. Honor and thank Bast for fuchsia.

Scientific and botanical name: *Fuchsia X hybrida*

Eat at least one serving of fuchsia at least once a month, taking in account the season and local availability.

Fuchsia is an edible flower. Consider using fuchsia in salads and as a garnish. Fuchsia has a slightly acidic taste.

Day 431: capers

Capers are sacred to Bast. Honor and thank Bast for caper.

Eat capers at least once per month. You may eat capers every day.

Caper is typically used as a spice or herb.

Day 432: brambleberry

Brambleberry is sacred to Bast. Honor and thank Bast for brambleberries.

Eat at least one serving of brambleberries per month, taking in account the season and local availability.

Day 433: gardenia

Gardenia is sacred to Bast. Honor and thank Bast for gardenia.

Scientific and botanical name: *Gardenia jasminoides*

Eat at least one serving of gardenia at least once a month, taking in account the season and local availability.

Gardenia is an edible flower. Consider using gardenia in salads and as a garnish. Gardenia has a sweet flavor.

Day 434: caraway

Caraway is sacred to Bast and Djehuti. Honor and thank Bast and Djehuti for caraway.

Eat caraway at least once per month, taking in account the season and local availability. You may eat caraway every day.

Eat caraway on days associated with Mercury.

Caraway goes well with cooked vegetables, including beets, cabbage, carrots, potatoes, turnips, and winter squash. Caraway also goes well with bread.

Day 435: boysenberry

Boysenberry is sacred to Bast. Honor and thank Bast for boysenberries.

Eat at least one serving of boysenberries per month, taking in account the season and local availability.

Day 436: scented geranium

Scented geranium is sacred to Bast. Honor and thank Bast for geranium.

Scientific and botanical name: *Pelargonium* Spp.

Eat at least one serving of scented geranium at least once a month, taking in account the season and local availability.

Scented geranium is an edible flower. Consider using geranium in salads and as a garnish. Has a mint or lemon flavor, depending on variety.

Warning: Citronella variety is *not* edible.

Day 437: cassia

Cassia or Chinese cinnamon is a plant in the same genus as cinnamon, but a much lower grade spice. Avoid cassia. The vast majority of powdered cinnamon is actually lower cost cassia. Get cinnamon in stick form to know you are getting the right plant.

Day 438: camu camu berry

Camu camu berry is sacred to Bast. Honor and thank Bast for camu camu berries.

Eat at least one serving of camu camu berries at least once a month, taking in account the season and local availability.

Camu camu berries have 30 to 60 times the vitamin C than an orange.

Day 439: gladiolus

Gladiolus is sacred to Bast. Honor and thank Bast for gladiolus.

Scientific and botanical name: *Gladiolus* Spp.

Eat at least one serving of gladiolus at least once a month, taking in account the season and local availability.

Gladiolus is an edible flower. Consider using gladiolus in salads and as a garnish. Gladiolus has a flavor similar to lettuce.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or touch composite flowers.

Day 440: celery seed

Celery seed is sacred to Bast. Honor and thank Bast for celery seed.

Eat celery seed at least once per month. You may eat celery seed every day.

Celery seed is typically used as a spice or herb.

Celery seed goes well with fish and potato.

Day 441: lion's mane mushroom

Lion's mane mushrooms are sacred to Bast and Brigid (Celtic). Honor and thank Bast for mushrooms.

Lion's mane mushrooms are also called sheep's head mushroom or bear's head mushroom. The Japanese name is yamabushitake. The Latin name is *Hericium erinaceus*.

Lion's mane mushrooms have nerve-regenerative properties. Two novel classes of Nerve Growth Factors (NGFs) — molecules stimulating the differentiation and re-myelination of neurons — have been discovered in this mushroom so far. These cyathane derivatives are termed “hericenones” and “erinacines.”

Lion's mane can taste very bitter unless cooked until crispy along the edges. Gourmet cooks caamelize lion's mane mushroom in olive oil, deglaze with saké wine, and then finish with butter to taste.

Eat lion's mane mushroom at least once per month. You may eat lion's mane mushroom every day.

Day 442: hibiscus

Hibiscus is sacred to Bast. Honor and thank Bast for hibiscus.

Scientific and botanical name: *Hibiscus rosa-sinensis*

Eat at least one serving of hibiscus at least once a month, taking in account the season and local availability. Hibiscus has a slightly acidic taste. Boil hibiscus flowers for hibiscus tea.

Hibiscus is an edible flower. Consider using hibiscus in salads and as a garnish.

Day 443: chameleon plant

Chameleon plant is sacred to Bast. Honor and thank Bast for chameleon plant.

Eat chameleon plant at least once per month. You may eat chameleon plant every day.

Chameleon plant is typically used as a spice or herb.

Day 444: maqui berry

Maqui berry is sacred to Bast. Honor and thank Bast for maqui berries.

Eat at least one serving of maqui berries at least once a month, taking in account the season and local availability.

The maqui berry is from Chili and is also known as the Chilean wineberry.

Maqui berries have more antioxidants than acai and pomegranate combined.

Maqui berries are native to Patagonia.

Day 445: hollyhock

Hollyhock is sacred to Bast. Honor and thank Bast for hollyhock.

Scientific and botanical name: *Alcea rosea*

Eat at least one serving of hollyhock at least once a month, taking in account the season and local availability.

Hollyhock is an edible flower. Consider using hollyhock in salads and as a garnish. Hollyhock has a very bland flavor.

Day 446: chaste tree

Chaste tree is sacred to Bast. Honor and thank Bast for chaste tree.

Eat chaste tree at least once per month. You may eat chaste tree every day.

Chaste tree is typically used as a spice or herb.

Day 447: freekeh

Freekeh is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for freekeh.

Eat at least one serving of freekeh at least once a month, taking in account the season and local availability.

Freekeh is a grain.

Day 448: hyssop flower

Hyssop flower is sacred to Bast. Honor and thank Bast for hyssop flower.

Scientific and botanical name: *Hyssopus officinalis*

Eat at least one serving of hyssop flower at least once a month, taking in account the season and local availability.

Hyssop flower is an edible flower. Consider using hyssop flowers in salads and as a garnish.

Warning: Pregnant women, as well as those with hypertension or epilepsy, should avoid hyssop flower.

Day 449: chervil

Chervil is sacred to Bast. Honor and thank Bast for chervil.

Eat chervil at least once per month. You may eat chervil every day.

Chervil is typically used as a spice or herb.

Chervil goes well with chicken eggs and potato.

Day 450: coffee fruit

Coffee fruit is sacred to Bast. Honor and thank Bast for coffee fruit.

Eat at least one serving of coffee fruit at least once a month, taking in account the season and local availability.

Although from the same plant, the coffee fruit should not be confused with the coffee bean. Coffee fruit is a good source of antioxidants and phenolic acids.

Day 451: Japanese persimmon

Japanese persimmon is sacred to Bast, Aset (Isis), Nwt, Het Heret (Hathor), and Amon-Ra. Honor and thank Bast, Aset, Nwt, Het Heret, and Amon-Ra for Japanese persimmon.

Eat at least one serving of Japanese persimmon at least once a month, taking in account the season and local availability.

Day 452: sweet cicely

Sweet cicely is sacred to Bast. Honor and thank Bast for cicely.

Eat sweet cicely at least once per month. You may eat cicely every day.

Sweet cicely is typically used as a spice or herb.

Day 453: farro

Farro, a grain, is sacred to Bast, Aset (Isis), Aset's husband Asar, and Renenutet. Honor and thank Bast, Aset, Asar, and Renenutet for farro.

Eat at least one serving of farro at least once a month, taking in account the season and local availability.

Farro is a grain from Egypt.

Cereal and cereal grains are named for Ceres, the Roman Goddess of harvest and agriculture.

Ancient Egyptians left a little grain on their kitchen flour as an offering to satisfy the *afarit* or underworld spirits. Grains were associated with Renenutet, the Cobra Goddess, who was also the guardian of the infant Heru Sa Aset (or Horus). With just Her gaze, She could mesmerize the enemies of Heru Sa Aset (Horus).

Day 454: Johnny jump up

Johnny jump up is sacred to Bast. Honor and thank Bast for Johnny jump up.

Scientific and botanical name: *Viola tricolor*

Eat at least one serving of Johnny jump up at least once a month, taking in account the season and local availability.

Johnny jump up is an edible flower. Consider using Johnny jump up in salads and as a garnish. Johnny jump up has a bland, sweet flavor.

Warning: Johnny jump up contains saponins and may be toxic in large amounts.

Day 455: cress

Cresses are sacred to Bast. Honor and thank Bast for cress.

Eat cress at least once per month. You may eat cress every day.

Cress is typically used as a spice or herb.

Day 456: baobab

Baobab fruit is sacred to Bast. Honor and thank Bast for baobab fruit.

Eat at least one serving of baobab fruit powder at least once a month, taking in account the season and local availability.

The baobab fruit is surrounded by an edible powder that is filled with antioxidants, calcium, iron, and potassium.

The baobab fruit powder is approximately 50% total fiber, has more calcium (gram for gram) than milk, more vitamin C than orange juice, more iron than red meat, more potassium than bananas and sweet potatoes, is full of antioxidants, and has one of the highest levels of magnesium of any fruit.

Day 457: lavender

Lavender is sacred to Bast. Honor and thank Bast for lavender.

Scientific and botanical name: *Lavendula*

Eat lavender at least once per month. You may eat lavender every day.

Lavender is typically used as a spice or herb.

Lavender is an edible flower. Consider using lavender in salads and as a garnish. lavender has a floral, slightly perfumy flavor.

Warning: Lavender oil is poisonous.

Day 458: cubeb powder

Cubeb powder is sacred to Bast. Honor and thank Bast for cubeb powder.

Eat cubeb powder at least once per month. You may eat cubeb powder every day.

Cubeb powder is typically used as a spice or herb.

Day 459: lycii berry

Lycii berry is sacred to Bast. Honor and thank Bast for lycii berries.

Eat at least one serving of lycii berries at least once a month, taking in account the season and

local availability.

Lycii berries are very closely related to goji berries, and sometimes the two berries are confused with each other.

Day 460: lemon flower

Lemon is sacred to Bast, Aset (Isis), Nwt, and Het Heret (Hathor). Honor and thank Bast, Aset, Nwt, and Het Heret for lemons.

Scientific and botanical name: *Citrus limon*

Eat at least one serving of lemon flower at least once a month, taking in account the season and local availability.

Lemon flower is an edible flower. Lemon flower has a very powerful lemon flavor. Use sparingly as a garnish or use to make citrus water.

Day 461: curry

Curry is sacred to Bast. Honor and thank Bast for curry.

Eat curry at least once per month. You may eat curry every day.

Curry is typically used as a spice or herb.

Curry is made from tumeric.

Curry goes well with corn and fish.

Day 462: seabuckthorn

Seabuckthorn is sacred to Bast. Honor and thank Bast for seabuckthorn.

Eat seabuckthorn (also known as sanddorn) at least once a month, taking in account the season and local availability.

Day 463: lemon verbena flower

Lemon verbena flowers are sacred to Bast. Honor and thank Bast for lemon verbena.

Scientific and botanical name: *Aloysia triphylla*

Eat at least one serving of lemon verbena flowers at least once a month, taking in account the season and local availability.

Lemon verbena is an edible flower. Consider using lemon verbena flowers in salads and as a garnish. Lemon verbena flowers have a lemon flavor. Lemon verbena flowers are used for herbal tea.

Day 464: curry leaf

Curry leaf is sacred to Bast. Honor and thank Bast for curry leaf.

Eat curry leaf at least once per month. You may eat curry leaf every day.

Curry leaf is typically used as a spice or herb.

Day 465: ginger greens

Ginger greens are sacred to Bast. Honor and thank Bast for ginger greens.

Eat at least one serving of ginger greens at least once a month, taking in account the season and local availability.

Stir chopped fresh ginger greens into sautéed kale, spinach, or bok choy, along with garlic and crushed red pepper flakes. Cook until fragrant.

Day 466: lilac

Lilac is sacred to Bast. Honor and thank Bast for lilac.

Scientific and botanical name: *Syringa vulgaris*

Eat at least one serving of lilac at least once a month, taking in account the season and local availability.

Lilac is an edible flower. Consider using lilac in salads and as a garnish. Lilac has a pungent, floral, lemon flavor.

Day 467: echinacea

Echinacea is sacred to Bast. Honor and thank Bast for echinacea.

Eat echinacea every day when you have a cold or flu or during cold and flu season.

Echinacea is typically used as an herb.

Day 468: Meyer lemon

Meyer lemon is sacred to Bast. Honor and thank Bast for Meyer lemon.

Eat at least one serving of Meyer lemon at least once a month, taking in account the season and local availability.

Day 469: mallow

Common mallow is sacred to Bast. Honor and thank Bast for mallow.

Scientific and botanical name: *Malva sylvestris*

Eat at least one serving of common mallow at least once a month, taking in account the season and local availability.

Mallow is an edible flower. Consider using mallow in salads and as a garnish. Mallow has a sweet, delicate taste.

Day 470: elder

Elder is sacred to Bast. Honor and thank Bast for elder.

Eat elder at least once per month. You may eat elder every day.

Elder is typically used as a spice or herb.

Day 471: blood orange

Blood orange is sacred to Bast. Honor and thank Bast for blood oranges.

Eat at least one serving of blood orange at least once a month, taking in account the season and local availability.

Day 472: marigold

Signet marigold is sacred to Bast. Honor and thank Bast for marigold.

Scientific and botanical name: *Tagetes tenuifolia*

Eat at least one serving of signet marigold at least once a month, taking in account the season and local availability.

Marigold is an edible flower. Consider using marigold in salads and as a garnish. Signet marigold has a spicy to bitter taste.

Day 473: epazote

Epazote is sacred to Bast. Honor and thank Bast for epazote.

Eat epazote at least once per month. You may eat epazote every day.

Epazote is typically used as a spice or herb.

Day 474: ugli fruit

Ugli fruit is sacred to Bast. Honor and thank Bast for ugli fruit.

Eat at least one serving of ugli fruit at least once a month, taking in account the season and local availability.

Day 475: marjoram flower

Marjoram flower is sacred to Bast. Honor and thank Bast for marjoram flower.

Scientific and botanical name: *Origanum majorana*

Eat at least one serving of marjoram flower at least once a month, taking in account the season and local availability.

Marjoram flower is an edible flower. Consider using marjoram flower in salads and as a garnish.

Day 476: filé powder

Filé powder is sacred to Bast. Honor and thank Bast for filé powder.

Eat filé powder at least once per month. You may eat filé powder every day.

Filé powder is typically used as a spice or herb.

Day 477: Japanese honeysuckle

Japanese honeysuckle is sacred to Bast. Honor and thank Bast for Japanese honeysuckle.

Scientific and botanical name: *Lonicera japonica*

Eat at least one serving of Japanese honeysuckle at least once a month, taking in account the season and local availability.

Japanese honeysuckle is an edible flower. Consider using Japanese honeysuckle in salads and as a garnish.

Warning: The berries of Japanese honeysuckle are highly poisonous.

Day 478: mint flower

Mint flower is sacred to Bast. Honor and thank Bast for mint flower.

Scientific and botanical name: *Mentha* Spp.

Eat at least one serving of mint flower at least once a month, taking in account the season and local availability.

Mint has an edible flower. Consider using mint flower in salads and as a garnish.

Day 479: fingerroot

Fingerroot is sacred to Bast. Honor and thank Bast for fingerroot.

Eat fingerroot at least once per month. You may eat fingerroot every day.

Fingerroot is typically used as a spice or herb.

Day 480: water spinach

Water spinach is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for water spinach.

Eat at least one serving of water spinach per month, taking in account the season and local availability.

Day 481: galangal

Galangal is sacred to Bast. Honor and thank Bast for galangal.

Eat galangal at least once per month. You may eat galangal every day.

Galangal is typically used as a spice or herb.

Day 482: mustard flower

Mustard flower is sacred to Bast. Honor and thank Bast for mustard flower.

Scientific and botanical name: *Brassica* Spp.

Eat at least one serving of mustard flower at least once a month, taking in account the season and local availability.

Mustard has an edible flower. Consider using mustard flower in salads and as a garnish. Eating mustard flowers in large quantities can cause red blotches on the skin. This applies to humans, who unlike legal person corporations that can spend unlimited amounts of money on political campaigns. I don't think that corporations actually eat mustard floowers or have skin, but clearly lawyers and government officials think they do.

Day 483: Ceylon spinach

Ceylon spinach is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Ceylon spinach.

Eat at least one serving of Ceylon spinach per month, taking in account the season and local availability.

Day 484: nasturtium

Nasturtium is sacred to Bast. Honor and thank Bast for nasturtium.

Scientific and botanical name: *Tropaeolum majus*

Eat at least one serving of nasturtium at least once a month, taking in account the season and local availability.

Nasturtium is an edible flower. Consider using nasturtium in salads and as a garnish. nasturtium has a sweet, mildly pungent, peppery flavor. Nasturtium buds can be pickled and used like capers.

Day 485: gale

Gale is sacred to Bast. Honor and thank Bast for gale.

Eat gale at least once per month. You may eat gale every day.

Gale is typically used as a spice or herb.

Day 486: Chinese broccoli

Chinese broccoli is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Chinese broccoli.

Eat at least one serving of Chinese broccoli per month, taking in account the season and local availability.

Day 487: okra flower

Okra flower is sacred to Bast. Honor and thank Bast for okra.

Scientific and botanical name: *Abelmoschus esculentus*

Eat at least one serving of okra flower at least once a month, taking in account the season and local availability. Okra flower has a taste similar to squash blossoms.

Okra has an edible flower. Consider using okra flower in salads and as a garnish.

Day 488: ginseng

Ginseng is sacred to Bast. Honor and thank Bast for ginseng.

Eat ginseng at least once per week. You may eat ginseng every day.

Ginseng is typically used as an herb.

Day 489: crown daisy

Crown daisy is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for crown daisy.

Eat at least one serving of crown daisy per month, taking in account the season and local availability.

Day 490: pansy

Pansy is sacred to Bast. Honor and thank Bast for pansy.

Scientific and botanical name: *Viola X wittrockiana*

Eat at least one serving of pansy at least once a month, taking in account the season and local availability.

Pansy is an edible flower. Consider using pansy in salads and as a garnish. Pansy has a sweet to tart flavor.

Day 491: grains of paradise

Grains of paradise is sacred to Bast. Honor and thank Bast for grains of paradise.

Eat grains of paradise at least once per month. You may eat grains of paradise every day.

Grains of paradise is typically used as a spice or herb.

Day 492: katuk

Katuk is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for katuk.

Eat at least one serving of katuk per month, taking in account the season and local availability.

Day 445: pea flower

493

Pea flower is sacred to Bast. Honor and thank Bast for pea flower.

Scientific and botanical name: *Pisum* Spp.

Eat at least one serving of pea flower at least once a month, taking in account the season and local availability.

Pea has an edible flower. Consider using pea flower in salads and as a garnish.

Warning: Flowering ornamental sweet peas are poisonous.

Day 494: holy basil

Holy basil is sacred to Bast. Honor and thank Bast for holy basil.

Eat holy basil at least once per month, taking in account the season and local availability. You may eat holy basil every day.

Holy basil is used as an herb or spice.

Holy basil helps reduce stress. Holy basil helps the body fight free radicals that cause inflammation.

Day 495: Joseph's coat

Joseph's coat is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Joseph's coat.

Eat at least one serving of Joseph's coat per month, taking in account the season and local availability.

Day 496: pineapple flower

Pineapple flower is sacred to Bast. Honor and thank Bast for pineapple flower.

Scientific and botanical name: *Feijoa sellowiana*

Eat at least one serving of pineapple flower at least once a month, taking in account the season and local availability.

Pineapple has an edible flower. Consider using pineapple flower in salads and as a garnish. Pineapple flower has a similar taste to the fruit.

Day 497: hyssop

Hyssop is sacred to Bast. Honor and thank Bast for hyssop.

Eat hyssop at least once per month. You may eat hyssop every day.

Hyssop is typically used as a spice or herb.

Day 498: Tonkin jasmine

Tonkin jasmine is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Tonkin jasmine.

Eat at least one serving of Tonkin jasmine per month, taking in account the season and local availability.

Day 499: primrose

Primrose is sacred to Bast. Honor and thank Bast for primrose.

Scientific and botanical name: *Primula vulgaris*

Eat at least one serving of primrose at least once a month, taking in account the season and local availability.

Primrose is an edible flower. Consider using primrose in salads and as a garnish. primrose has a bland to sweet flavor.

Warning: Birdseye primrose *Primula farinosa* causes contact dermatitis.

Day 500: juniper

Juniper is sacred to Bast. Honor and thank Bast for juniper.

Eat juniper at least once per month. You may eat juniper every day.

Juniper is typically used as a spice or herb.

Day 501: dragon fruit

Dragon fruit (pitaya) is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for dragon fruit.

Eat at least one serving of dragon fruit per month, taking in account the season and local availability.

Day 502: radish flower

Radish flower is sacred to Bast. Honor and thank Bast for radish flower.

Scientific and botanical name: *Raphanus sativus*

Eat at least one serving of radish flower at least once a month, taking in account the season and local availability.

Radish has an edible flower. Consider using radish flower in salads and as a garnish. Radish flower has a milder version of the radish taste.

Day 503: kaffir lime leaves

Kaffir lime leaves are sacred to Bast. Honor and thank Bast for kaffir lime leaves.

Eat kaffir lime leaves at least once per month. You may eat kaffir lime leaves every day.

Kaffir lime leaves is typically used as a spice or herb.

Day 504: yu choy

Yu choy is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for yu choy.

Eat at least one serving of yu choy per month, taking in account the season and local availability.

Day 505: redbud

Redbud is sacred to Bast. Honor and thank Bast for redbud.

Scientific and botanical name: *Cercis canadensis*

Eat at least one serving of redbud at least once a month, taking in account the season and local availability.

Redbud is an edible flower. Consider using redbud in salads and as a garnish. redbud has a slightly sweet flavor.

Day 506: kokam

Kokam is sacred to Bast. Honor and thank Bast for kokam.

Eat kokam at least once per month. You may eat kokam every day.

Kokam is typically used as a spice or herb.

Day 507: long beans

Long beans is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for long beans.

Eat at least one serving of long beans per month, taking in account the season and local availability.

Day 508: rosemary flower

Rosemary flower is sacred to Bast. Honor and thank Bast for rosemary.

Scientific and botanical name: *Rosmarinus officinalis*

Eat at least one serving of rosemary flower at least once a month, taking in account the season and local availability.

Rosemary has an edible flower. Consider using rosemary flower in salads and as a garnish. Rosemary flower has a pine-like, sweet and savory taste.

Day 509: lemongrass

Lemongrass is sacred to Bast and Djehuti. Honor and thank Bast and Djehuti for lemongrass.

Eat lemongrass at least once per month, taking in account the season and local availability. You may eat lemongrass every day.

Eat lemongrass on days associated with Mercury.

Day 508: sinqua

Sinqua is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for sinqua.

Eat at least one serving of sinqua per month, taking in account the season and local availability.

Day 511: runner bean flower

Runner bean flower is sacred to Bast. Honor and thank Bast for runner bean flower.

Scientific and botanical name: *Phaseolus coccineus*

Eat at least one serving of runner bean flower at least once a month, taking in account the season and local availability.

Runner bean flower is an edible flower. Consider using runner bean flower in salads and as a garnish. Runner bean flower has a bean-like flavor.

Day 512: lemon myrtle

Lemon myrtle is sacred to Bast. Honor and thank Bast for lemon myrtle.

Eat lemon myrtle at least once per month. You may eat lemon myrtle every day.

Lemon myrtle is typically used as a spice or herb.

Day 513: moqua

Moqua is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for moqua.

Eat at least one serving of moqua per month, taking in account the season and local availability.

Day 514: sage flower

Sage flower is sacred to Bast and Artemis. Honor and thank Bast and Artemis for sage.

Scientific and botanical name: *Salvia officinalis*

Eat at least one serving of sage flower at least once a month, taking in account the season and local availability.

Sage has an edible flower. Consider using sage flower in salads and as a garnish. Do not eat sage flower in large amounts over a long period of time.

Day 515: lovage

Lovage is sacred to Bast. Honor and thank Bast for lovage.

Eat lovage at least once per month. You may eat lovage every day.

Lovage is typically used as a spice or herb.

Day 516: opo

Opo is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for opo.

Eat at least one serving of opo per month, taking in account the season and local availability.

Day 517: savory flower

Summer savory flower is sacred to Bast. Honor and thank Bast for savory.

Scientific and botanical name: *Satureja hortensis*

Eat at least one serving of summer savory flower at least once a month, taking in account the season and local availability.

Savory has an edible flower. Consider using savory flower in salads and as a garnish.

Day 518: mace

Mace is sacred to Bast. Honor and thank Bast for mace.

Eat mace at least once per month. You may eat mace every day.

Mace is typically used as a spice or herb.

Day 519: Napa cabbage

Napa cabbage is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Napa cabbage.

Eat at least one serving of Napa cabbage per month, taking in account the season and local availability.

Day 520: snapdragon

Snapdragon is sacred to Bast. Honor and thank Bast for snapdragon.

Scientific and botanical name: *Antirrhinum majus*

Eat at least one serving of snapdragon at least once a month, taking in account the season and local availability.

Snapdragon is an edible flower. Consider using snapdragon in salads and as a garnish. Snapdragon has a bland to bitter taste.

Day 521: mahlab or mahaleb cherry

Mahlab is sacred to Bast. Honor and thank Bast for mahlab.

Eat mahlab at least once per month. You may eat mahlab every day.

Mahlab is typically used as a spice or herb.

Day 522: rapeseed leaves

Rapeseed leaves is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for rapeseed leaves.

Rapeseed is now often called canola (for Canadian oil) because many people find the old traditional name offensive.

Eat at least one serving of rapeseed leaves per month, taking in account the season and local availability.

Day 523: society garlic

Society garlic is sacred to Bast. Honor and thank Bast for society garlic.

Scientific and botanical name: *Tulbaghia violacea*

Eat at least one serving of society garlic at least once a month, taking in account the season and local availability.

Society garlic is an edible flower. Consider using society garlic in salads and as a garnish. Society garlic flower has a very mild garlic flavor.

Day 524: marshmallow

Marshmallow is sacred to Bast. Honor and thank Bast for marshmallow.

Not to be confused with artificial marshmallow, often made from corn syrup. This is a reference to the actual real plant.

Eat marshmallow at least once per month. You may eat marshmallow every day.

Marshmallow is typically used as a spice or herb.

Day 525: Chinese lettuce

Chinese lettuce is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for Chinese lettuce.

Eat at least one serving of Chinese lettuce per month, taking in account the season and local availability.

Day 526: squash blossom

Squash blossom (also known as zucchini blossom) is sacred to Bast. Honor and thank Bast for squash blossom.

Scientific and botanical name: *Cucurbita pepo* Spp.

Eat at least one serving of squash blossom at least once a month, taking in account the season and local availability.

Squash blossom is an edible flower. Consider using squash blossom in salads and as a garnish. Squash blossom has a sweet, nectar flavor.

Day 527: mastic

Mastic is sacred to Bast. Honor and thank Bast for mastic.

Eat mastic at least once per month. You may eat mastic every day.

Mastic is typically used as a spice or herb.

Day 528: kudzu root

Kudzu root is sacred to Bast, Aset (Isis), and Aset's husband Asar. Honor and thank Bast, Aset, and Asar for kudzu root.

Eat at least one serving of kudzu root per month, taking in account the season and local availability.

Day 529: sunflower

Sunflower is sacred to Bast. Honor and thank Bast for sunflower.

Scientific and botanical name: *Helianthus annuus*

Eat at least one serving of sunflower at least once a month, taking in account the season and

local availability.

Sunflower has an edible flower. Consider using sunflower in salads and as a garnish. Sunflower has a leafy, slightly bitter taste. Lessen the bitter taste by lightly steaming the petals. Unopened flower buds can be steamed like artichokes.

Day 530: mugwort

Mugwort is sacred to Bast. Honor and thank Bast for mugwort.

Eat mugwort at least once per month. You may eat mugwort every day.

Mugwort is typically used as a spice or herb.

Day 531: thyme flower

Thyme flower is sacred to Bast. Honor and thank Bast for thyme.

Scientific and botanical name: *Thymus vulgaris*

Eat at least one serving of thyme flower at least once a month, taking in account the season and local availability.

Thyme has an edible flower. Consider using thyme flower in salads and as a garnish. Thyme flower has a lemon flavor.

Day 532: myrtle

Myrtle is sacred to Bast. Honor and thank Bast for myrtle.

Eat myrtle at least once per month. You may eat myrtle every day.

Myrtle is typically used as a spice or herb.

Day 533: violet

Violet is sacred to Bast. Honor and thank Bast for violet.

Scientific and botanical name: *Viola*

Eat at least one serving of violet at least once a month, taking in account the season and local availability.

Violet is an edible flower. Consider using violet in salads and as a garnish. Violet has a sweet, nectar-like flavor.

Day 534: nettle

Nettle is sacred to Bast. Honor and thank Bast for nettle.

Eat nettle at least once per month. You may eat nettle every day.

Nettle is typically used as a spice or herb.

In its raw form, nettle is known as stinging nettle and is poisonous plant. Dried and then boiled nettle leaves help clean the bowels.

Day 535: yucca

Banana yucca is sacred to Bast. Honor and thank Bast for banana yucca.

Scientific and botanical name: *Yucca baccata*

Eat at least one serving of banana yucca (petals and fruit only) at least once a month, taking in account the season and local availability.

Banana yucca is an edible flower. Consider using banana yucca in salads and as a garnish. banana yucca has a crunchy, fresh flavor.

Warning: Eat only the petals and the fruit of the banana yucca. Other parts of the plant have saponin, a poison.

Day 536: nigella

Nigella is sacred to Bast. Honor and thank Bast for nigella.

Eat nigella at least once per month. You may eat nigella every day.

Nigella is typically used as a spice or herb.

Day 536: olida

Olida is sacred to Bast. Honor and thank Bast for olida.

Eat olida at least once per month. You may eat olida every day.

Olida is typically used as a spice or herb.

Day 538: pandanus flower

Pandanus flower is sacred to Bast. Honor and thank Bast for pandanus flower.

Eat pandanus flower at least once per month. You may eat pandanus flower every day.

Pandanus flower is typically used as a spice or herb.

Day 539: pandan leaf

Pandan leaf is sacred to Bast. Honor and thank Bast for pandan leaf.

Eat pandan leaf at least once per month. You may eat pandan leaf every day.

Pandan leaf is typically used as a spice or herb.

Day 540: paracress

Paracress is sacred to Bast. Honor and thank Bast for paracress.

Eat paracress at least once per month. You may eat paracress every day.

Paracress is typically used as a spice or herb.

Day 541: pepper rosé

Pepper rosé is sacred to Bast. Honor and thank Bast for pepper rosé.

Eat pepper rosé at least once per month. You may eat pepper rosé every day.

Pepper rosé is typically used as a spice or herb.

Day 542: perilla

Perilla is sacred to Bast. Honor and thank Bast for perilla.

Eat perilla at least once per month. You may eat perilla every day.

Perilla is typically used as a spice or herb.

Day 543: poppy seed

Poppy seed is sacred to Bast. Honor and thank Bast for poppy seed.

Eat poppy seed at least once per month. You may eat poppy seed every day.

Poppy seed is typically used as a spice or herb.

Poppy seed goes well with bread and potato.

Day 544: rue

Rue is sacred to Bast. Honor and thank Bast for rue.

Eat rue at least once per month. You may eat rue every day.

Rue is typically used as a spice or herb.

Day 545: safflower

Safflower is sacred to Bast. Honor and thank Bast for safflower.

Scientific and botanical name: *Carthamus tinctorius*

Eat safflower at least once per month. You may eat safflower every day.

Safflower is typically used as a spice or herb.

Safflower is an edible flower. Consider using safflower in salads and as a garnish. Safflower has a very mild saffron-like flavor.

Warning: Only the petals of this composite flower is edible. The pollen is highly allergenic and may cause reactions. Those with asthma, hayfever, or ragweed allergy should not consume or

touch composite flowers.

Day 546: salad burnet

Salad burnet is sacred to Bast. Honor and thank Bast for salad burnet.

Eat salad burnet at least once per month. You may eat salad burnet every day.

Salad burnet is typically used as a spice or herb.

Day 547: sea salt

Sea salt is sacred to Aset (Isis) and rock salt is sacred to Seth. Honor and thank Aset for sea salt.

Eat sea salt or rock salt at least once per week. You may eat sea salt or rock salt every day.

Day 548: sassafras

Sassafras is sacred to Bast. Honor and thank Bast for sassafras.

Eat sassafras at least once per month. You may eat sassafras every day.

Sassafras is typically used as a spice or herb.

Day 549: savory

Savory is sacred to Bast. Honor and thank Bast for savory.

Eat savory at least once per month. You may eat savory every day.

Savory is typically used as a spice or herb.

Savory goes well with dried beans, corn, and fish.

Day 550: sichuan pepper

Sichuan pepper is sacred to Bast. Honor and thank Bast for sichuan pepper.

Eat sichuan pepper at least once per month. You may eat sichuan pepper every day.

Sichuan pepper is typically used as a spice or herb.

Day 551: silphion

Silphion is sacred to Bast. Honor and thank Bast for silphion.

Eat silphion at least once per month. You may eat silphion every day.

Silphion is typically used as a spice or herb.

Day 552: southernwood

Southernwood is sacred to Bast. Honor and thank Bast for southernwood.

Eat southernwood at least once per month. You may eat southernwood every day.

Southernwood is typically used as a spice or herb.

Day 553: star anise

Star anise is sacred to Bast and Seshat (Sothis). Honor and thank Bast and Seshat for star anise.

Eat star anise at least once per month. You may eat star anise every day.

Star anise is typically used as a spice or herb.

Day 554: sumac

Sumac is sacred to Bast. Honor and thank Bast for sumac.

Eat sumac at least once per month. You may eat sumac every day.

Sumac is typically used as a spice or herb.

Day 555: taramind

Taramind is sacred to Bast. Honor and thank Bast for taramind.

Eat taramind at least once per month. You may eat taramind every day.

Taramind is typically used as a spice or herb.

Day 556: tonka bean

Tonka bean is sacred to Bast. Honor and thank Bast for tonka bean.

Eat tonka bean at least once per month. You may eat tonka bean every day.

Tonka bean is typically used as a spice or herb.

Day 557: Vietnamese mint

Vietnamese mint is sacred to Bast. Honor and thank Bast for Vietnamese mint.

Eat Vietnamese mint at least once per month. You may eat Vietnamese mint every day.

Vietnamese mint is typically used as a spice or herb.

Day 558: wasabi

Wasabi is sacred to Bast. Honor and thank Bast for wasabi.

Eat wasabi at least once per month. You may eat wasabi every day.

Wasabi is typically used as a spice or herb.

Day 559: wattleseed

Wattleseed is sacred to Bast. Honor and thank Bast for wattleseed.

Eat wattleseed at least once per month. You may eat wattleseed every day.

Wattleseed is typically used as a spice or herb.

Day 560: white mustard

White mustard is sacred to Bast. Honor and thank Bast for white mustard.

Eat white mustard at least once per month. You may eat white mustard every day.

White mustard is typically used as a spice or herb.

Day 561: black pepper

Black pepper is sacred to Bast. Honor and thank Bast for black pepper.

Eat black pepper at least once per week. You may eat black pepper every day.

Black pepper is typically used as a spice or herb.

Day 562: white pepper

White pepper is sacred to Bast. Honor and thank Bast for white pepper.

Eat white pepper at least once per month. You may eat white pepper every day.

White pepper is typically used as a spice or herb.

White pepper is usually used as a substitute for black pepper when black pepper would discolor a light-colored or white dish.

Day 563: zedoary

Zedoary (white tumeric) is sacred to Bast. Honor and thank Bast for zedoary.

Eat zedoary at least once per month. You may eat zedoary every day.

Zedoary is typically used as a spice or herb.

stop eating meat

For those raised on eating meats, switching to a meatless diet will be difficult. It can best be handled in stages, eliminating first red meats, then all mammals, and then birds.

In July 2009, after an exhaustive study review, the American Dietetic Association concluded that well-planned vegetarian diets are safe for all people at every stage of life, including pregnant

women, nursing mothers, babies, children, teenagers, adults, and seniors.

The American Dietetic Association emphasized that a meat-free meal plan may lower rates of obesity, Type 2 adult onset diabetes, heart disease, and some cancers.

“Oh, my fellow men, do not defile your bodies with sinful foods. We have corn, we have apples bending down the branches with their weight, and grapes swelling on the vines. There are sweet-flavored herbs, and vegetables which can be cooked and softened over the fire, nor are you denied milk or thyme-scented honey. The earth affords a lavish supply of riches, of innocent foods, and offers you banquets that involve no bloodshed or slaughter; only beasts satisfy their hunger with flesh, and not even all of those, because horses, cattle, and sheep live on grass.”, Pythagoras (Greek mathematician). Pythagoras ate bread and honey for breakfast and raw vegetables for supper. He also paid fishermen to throw their catch back into the sea.

“Can you really ask what reason Pythagoras had for abstinence from flesh? For my part I rather wonder both by what accident and in what state of mind the first man touched his mouth to gore and brought his lips to the flesh of a dead creature, set forth tables of dead, stale bodies, and ventured to call food and nourishment the parts that had a little before bellowed and cried, moved and lived. How could eyes endure the slaughter when throats were slit and hides flayed and limbs torn from limb? How could his nose endure the stench? How was it that the pollution did not turn away his taste, which made contact with sores of others and sucked juices and serums from mortal wounds? It is certainly not lions or wolves that we eat out of self-defense; on the contrary, we ignore these and slaughter harmless, tame creatures without stings or teeth to harm us. For the sake of a little flesh we deprive them of sun, of light, of the duration of life to which they are entitled by birth and being. ... If you declare that you are naturally designed for such a diet, then first kill for yourself what you want to eat. Do it, however, only through your own resources, unaided by cleaver or cudgel or any kind of ax.”, Plutarch (Roman historian).

“It may indeed be doubted whether butchers’ meat is anywhere a necessary of life. Grain and other vegetables, with the help of milk, cheese, and butter, or oil, where butter is not to be had, afford the most plentiful, the most wholesome, the most nourishing, and the most invigorating diet. Decency nowhere requires that any man should eat butchers’ meat.”, Adam Smith (British economist).

“Let the advocate of animal food force himself to a decisive experiment on its fitness, and as Plutarch recommends, tear a living lamb with his teeth and, plunging his head into its vitals, slake his thirst with the steaming blood ... then, and then only, would he be consistent.”, Percy Bysshe Shelley (poet).

“Is it not a reproach that man is a carnivorous animal? True, he can and does live, in a great measure, by preying on other animals; but this is a miserable way—as any one who will go to snaring rabbits, or slaughtering lambs, may learn—and he will be regarded as a benefactor of his race who shall teach man to confine himself to a more innocent and wholesome diet. Whatever my own practice may be, I have no doubt that it is a part of the destiny of the human race, in its gradual improvement, to leave off eating animals, as surely as the savage tribes have left off

eating each other when they came in contact with the more civilized.”, Henry David Thoreau, *Walden*.

“Various philosophers and religious leaders tried to convince their disciples and followers that animals are nothing more than machines without a soul, without feelings. However, anyone who has ever lived with an animal—be it a dog, a bird, or even a mouse—knows that this theory is a brazen lie, invented to justify cruelty.”, Isaac Bashevis Singer (Nobel literature prize winner).

War Is A Racket

War Is A Racket

War Is A Racket **BY Smedly D. Butler**

This short anti-war pamphlet was written by a Major General in the Marines who was an American military hero, but became disillusioned with the profiteering, propaganda, and injustice of the military-industrial and intelligence-foreign policy establishment , and came to oppose American involvement in foreign wars designed to benefit financial and industrial interests.

About the Author

Why don't those damned oil companies fly their own flags on their personal property—maybe a flag with a gas pump on it?
Brigadier General Smedley D. Butler, 1937.

General Smedley D. Butler (1881-1940), was a senior Marine Corps officer who fought in both the Mexican Revolution and World War I. At the time of his death, Butler was the most decorated Marine in U.S. history. During his 34-year career as a Marine, he participated in military actions in the Philippines, China, Central America, the Caribbean, and France. In his later years Butler became an outspoken critic of American wars and their consequences. In 1933, he also exposed an alleged plan to overthrow the United States government.

By the end of his career, Butler had received 16 medals, five for heroism. He is one of 19 men to receive the Medal of Honor twice, one of three to be awarded both the Marine Corps Brevet Medal and the Medal of Honor, and the only Marine to be awarded the Brevet Medal and two Medals of Honor, all for separate actions.

In 1935, Butler wrote “War Is a Racket”, where he described and criticized the workings of

the United States in its foreign actions and wars, such as those in which he had been involved, including the American corporations and other imperialist motivations behind them. After retiring from service, he became a popular advocate, speaking at meetings organized by veterans, pacifists, and church groups in the 1930s.

Butler died unexpectedly of unknown causes at the age of 59, shortly before the United States became involved in World War II.

CHAPTER ONE

War is a racket!

War is a racket. It always has been. It is possibly the oldest, easily the most profitable, surely the most vicious. It is the only one international in scope. It is the only one in which the profits are reckoned in dollars and the losses in lives.

A racket is best described, I believe, as something that is not what it seems to the majority of people. Only a small “inside” group knows what it is about. It is conducted for the benefit of the very few, at the expense of the very many. Out of war a few people make huge fortunes.

In the World War [One} a mere handful garnered the profits of the conflict. At least 21,000 new millionaires and billionaires were made in the United States during the World War. That many admitted their huge blood gains in their income tax returns. How many other war millionaires falsified their income tax returns no one knows

How many of these war millionaires shouldered a rifle? How many of them dug a trench? How many of them knew what it meant to go hungry in a rat-infested dugout? How many of them spent sleepless, frightened nights, ducking shells and shrapnel and machine gun bullets? How many of them parried the bayonet thrust of an enemy? How many of them were wounded or killed in battle?

Out of war nations acquire additional territory, if they are victorious. They just take it. This newly acquired territory promptly is exploited by the few—the self-same few who wrung dollars out of blood in the war. The general public shoulders the bill.

And what is this bill?

This bill renders a horrible accounting. Newly placed gravestones. Mangled bodies. Shattered minds. Broken hearts and homes. Economic instability. Depression and all its

For a great many years, as a soldier, I had a suspicion that war was a racket; not until I retired to civil life did I fully realize it. Now that I see the international war clouds again gathering, as they are today, I must face it and speak out.

Again they are choosing sides. France and Russia met and agreed to stand side by side. Italy

and Austria hurried to make a similar agreement. Poland and Germany cast sheep's eyes at each other, forgetting, for the nonce, their dispute over the Polish Corridor. The assassination of King Alexander of Yugoslavia complicated matters. Yugoslavia and Hungary, long bitter enemies, were almost at each other's throats. Italy was ready to jump in. But France was waiting. So was Czechoslovakia. All of them are looking ahead to war. Not the people—not those who fight and pay and die—only those who foment wars and remain safely at home to profit.

There are 40,000,000 men under arms in the world today, and our statesmen and diplomats have the temerity to say that war is not in the making.

Hell's bells! Are these 40,000,000 men being trained to be dancers?

Not in Italy, to be sure. Premier Mussolini knows what they are being trained for. He, at least, is frank enough to speak out. Only the other day, Il Duce in "International Conciliation," the publication of the Carnegie Endowment for International Peace, said:

"And, above all, Fascism, the more it considers and observes the future and the development of humanity quite apart from political considerations of the moment, believes neither in the possibility for the utility of perpetual peace ... War alone brings up to its highest tension all human energy and puts the stamp of nobility upon the peoples who have the courage to meet it."

Undoubtedly Mussolini means exactly what he says. His well trained army, his great fleet of planes, and even his navy are ready for war—anxious for it, apparently. His recent stand at the side of Hungary in the latter's dispute with Yugoslavia showed that. And the hurried mobilization of his troops on the Austrian border after the assassination of Dollfuss showed it too. There are others in Europe too whose sabre-rattling presages war, sooner or later.

Herr Hitler, with his rearming Germany and his constant demands for more and more arms, is an equal if not a greater menace to peace. France only recently increased the term of military service for its youth from a year to eighteen months.

Yes, all over, nations are camping on their arms. The mad dogs of Europe are on the loose.

In the Orient the maneuvering is more adroit. Back in 1904, when Russian and Japan fought, we kicked out our old friends the Russians and backed Japan. Then our very generous international bankers were financing Japan. Now the trend is to poison us against the Japanese. What does the "open door" policy in China mean to us? Our trade with China is about \$90,000,000 a year. Or the Philippine Islands? We have spent about \$600,000,000 in the Philippines in 35 years and we (our bankers and industrialists and speculators) have private investments there of less than \$200,000.

Then, to save that China trade of about \$90,000,000, or to protect these private investments of less than \$200,000,000 in the Philippines, we would be all stirred up to hate Japan and go to war—a war that might well cost us tens of billions of dollars, hundreds of thousands of lives of Americans, and many more hundreds of thousands of physically maimed and mentally

unbalanced men.

Of course, for this loss, there would be a compensating profit—fortunes would be made. Millions and billions of dollars would be piled up. By a few. Munitions makers. Ship builders. Manufacturers. Meat packers. Speculators. They would fare well.

Yes, they are getting ready for another war. Why shouldn't they? It pays high dividends.

But what does it profit the masses?

What does it profit the men who are killed? What does it profit the men who are maimed? What does it profit their mothers and sisters, their wives and their sweethearts? What does it profit their children?

What does it profit anyone except the very few to whom war means huge profits?

Yes, and what does it profit the nation?

Take our own case. Until 1898 we didn't own a bit of territory outside the mainland of North America. At that time our national debt was a little more than \$1,000,000,000. Then we became "internationally minded." We forgot, or shunted aside, the advice of the Father of our Country. We forgot Washington's warning about "entangling alliances." We went to war. We acquired outside territory. At the end of the World War period, as a direct result of our fiddling in international affairs, our national debt had jumped to over \$25,000,000,000. Therefore, on a purely financial bookkeeping basis, we ran a little behind year for year, and that foreign trade might well have been ours without the wars.

It would have been far cheaper (not to say safer) for the average American who pays the bills to stay out of foreign entanglements. For a very few this racket, like bootlegging and other underworld rackets, brings fancy profits, but the cost of operations is always transferred to the people—who do not profit.

CHAPTER TWO

Who Makes The Profits?

The World War, rather our brief participation in it, has cost the United States some \$52,000,000,000. Figure it out. That means \$400 to every American man, woman, and child. And we haven't paid the debt yet. We are paying it, our children will pay it, and our children's children probably still will be paying the cost of that war.

The normal profits of a business concern in the United States are six, eight, ten, and sometimes even twelve per cent. But wartime profits—ah! that is another matter—twenty, sixty, one hundred, three hundred, and even eighteen hundred per cent—the sky is the limit. All that the traffic will bear. Uncle Sam has the money. Let's get it.

Of course, it isn't put that crudely in war time. It is dressed into speeches about patriotism, love of country, and "we must all put our shoulder to the wheel," but the profits jump and leap and skyrocket—and are safely pocketed. Let's just take a few examples:

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Take our friend the du Fonts, the powder people—didn't one of them testify before a Senate committee recently that their powder won the war? Or something? How did they do in the war? They were a patriotic corporation. Well, the average earnings of the du Ponts for the period 1910 to 1914 was \$6,000,000 a year. It wasn't much, but the du Ponts managed to get along on it. Now let's look at their average yearly profit during the war years, 1914 to 1918. Fifty-eight million dollars a year profit, we find! Nearly ten times that of normal times, and the profits of normal times were pretty good. An increase in profits of more than 950 per cent.

Take one of our little steel companies that so patriotically shunted aside the making of rails and girders and bridges to manufacture war materials. Well, their 1910-1914 yearly earnings averaged \$6,000,000. Then came the war. And, like loyal citizens, Bethlehem Steel promptly turned to munitions making. Did their profits jump—or did they let Uncle Sam in for a bargain? Well, their 1914-1918 average was \$49,000,000 a year!

Or, let's take United States Steel. The normal earnings during the five-year period prior to the war were \$105,000,000 a year. Not bad. Then along came the war and up went the profits. The average yearly profit for the period 1914-1918 was \$240,000,000. Not bad.

There you have some of the steel and powder earnings. Let's look at something else. A little copper, perhaps. That always does well in war times.

Anaconda, for instance. Average yearly earnings during the pre-war years 1910-1914 of \$10,000,000. During the war years 1914-1918 profits leaped to \$34,000,000 per year.

Or Utah Copper. Average of \$5,000,000 per year during the 1910-1914 period. Jumped to average of \$21,000,000 yearly profits for the war period.

Let's group these five, with three smaller companies. The total yearly average profits of the pre-war period 1910-1914 were \$137,480,000. Then along came the war. The yearly average profits for this group skyrocketed to \$408,300,000.

A little increase in profits of approximately 200 per cent.

Does war pay? It paid them. But they aren't the only ones. There are still others. Let's take leather.

For the three-year period before the war the total profits of Central Leather Company were

\$3,500,000. That was approximately \$1,167,000 a year. Well, in 1916 Central Leather returned a profit of \$15,500,000, a small increase of 1,100 per cent. That's all. The General Chemical Company averaged a profit for the three years before the war of a little over \$800,000 a year. Then came the war, and the profits jumped to \$12,000,000. A leap of 1,400 per cent.

International Nickel Company—and you can't have a war without nickel—showed an increase in profits from a mere average of \$4,000,000 a year to \$73,500,000 yearly. Not bad? An increase of more than 1,700 per cent.

American Sugar Refining Company averaged \$200,000 a year for the three years before the war. In 1916 a profit of \$6,000,000 was recorded.

Listen to Senate Document No. 259. The Sixty-Fifth Congress, reporting on corporate earnings and government revenues. Considering the profits of 122 meat packers, 153 cotton manufactures, 299 garment makers, 49 steel plants, and 340 coal producers during the war. Profits under 25 per cent were exceptional. For instance, the coal companies made between 100 per cent and 7,856 per cent on their capital stock during the war. The Chicago packers doubled and tripled their earnings.

And let us not forget the bankers who financed this great war. If anyone had the cream of the profits it was the bankers. Being partnerships rather than incorporated organization, they do not have to report to stockholders. And their profits were as secret as they were immense. How the bankers made their millions and their billions I do not know, because those little secrets never become public—even before a Senate investigatory body.

But here's how some of the other patriotic industrialists and speculators chiseled their way into war profits.

Take the shoe people. They like war. It brings business with abnormal profits. They made huge profits on sales abroad to our allies. Perhaps, like the munitions manufacturers and armament makers, they also sold to the enemy. For a dollar is a dollar whether it comes from Germany or from France. But they did well by Uncle Sam too. For instance, they sold Uncle Sam 35,000,000 pairs of hobnailed service shoes. There were 4,000,000 soldiers. Eight pairs, and more, to a soldier. My regiment during the war had only a pair to a soldier. Some of these shoes probably are still in existence. They were good shoes. But when the war was over Uncle Sam had a matter of 25,000,000 pairs left over. Bought—and paid for. Profits recorded and pocketed.

There was still lots of leather left. So the leather people sold your Uncle Sam hundreds of thousands of McClellan saddles for the cavalry. But there wasn't any American cavalry overseas! Somebody had to get rid of this leather, however. Somebody had to make a profit on it—so we had a lot of those McClellan saddles. And we probably have those yet.

Also somebody had a lot of mosquito netting. They sold your Uncle Sam 20,000,000 mosquito nets for the use of the soldiers overseas. I suppose the boys were expected to put it over them as they tried to sleep in the muddy trenches—one hand scratching cooties on their backs

and the other making passes at scurrying rats. Well, not one of these mosquito nets ever got to France!

Anyhow, these thoughtful manufacturers wanted to make sure that no soldier would be without his mosquito net, so 40,000,000 additional yards of mosquito netting were sold to Uncle Sam.

There were pretty good profits in mosquito netting in war days, even if there were no mosquitoes in France.

I suppose, if the war had lasted just a little longer, the enterprising mosquito netting manufacturers would have sold your Uncle Sam a couple of consignments of mosquitoes to plant in France so that more mosquito netting would be in order.

Airplane and engine manufacturers felt they, too, should get their just profits out of this war. Why not? Everybody else was getting theirs. So \$1,000,000,000—count them if you live long enough—was spent by Uncle Sam in building airplanes and airplane engines that never left the ground! Not one plane, or motor, out of the billion dollars' worth ordered, ever got into a battle in France. Just the same the manufacturers made their little profit of 30, 100 or perhaps 300 percent.

Undershirts for soldiers cost 14 cents to make and Uncle Sam paid 30 cents to 40 cents each for them—a nice little profit for the undershirt manufacturer. And the stocking manufacturers and the uniform manufacturers and the cap manufacturers and the steel helmet manufacturers—all got theirs.

Why, when the war was over some 4,000,000 sets of equipment—knapsacks and the things that go to fill them—crammed warehouses on this side. Now they are being scrapped because the regulations have changed the contents. But the manufacturers collected their wartime profits on them—and they will do it all over again the next time.

There were lots of brilliant ideas for profit making during the war.

One very versatile patriot sold Uncle Sam twelve dozen 48-inch wrenches. Oh, they were very nice wrenches. The only trouble was that there was only one nut ever made that was large enough for these wrenches. That is the one that holds the turbines at Niagara Falls! Well, after Uncle Sam had bought them and the manufacturer had pocketed the profit, the wrenches were put on freight cars and shunted all around the United States in an effort to find a use for them. When the Armistice was signed it was indeed a sad blow to the wrench manufacturer. He was just about to make some nuts to fit the wrenches. Then he planned to sell these, too, to your Uncle Sam.

Still another had the brilliant idea that colonels shouldn't ride in automobiles, nor should they even ride horseback. One had probably seen a picture of Andy Jackson riding on a buckboard. Well, some 6,000 buckboards were sold to Uncle Sam for the use of colonels! Not one of them was used. But the buckboard manufacturer got his war profit.

The shipbuilders felt they should come in on some of it, too. They built a lot of ships that made a lot of profit. More than \$3,000,000,000 worth. Some of the ships were all right. But \$635,000,000 worth of them were made of wood and wouldn't float! The seams opened up—and they sank. We paid for them, though. And somebody pocketed the profits.

It has been estimated by statisticians and economists and researchers that the war cost your Uncle Sam \$52,000,000,000. Of this sum, \$39,000,000,000 was expended in the actual war period. This expenditure yielded \$16,000,000,000 in profits. That is how the 21,000 billionaires and millionaires got that way. This \$16,000,000,000 profits is not to be sneezed at. It is quite a tidy sum. And it went to a very few.

The Senate (Nye) committee probe of the munitions industry and its wartime profits, despite its sensational disclosures, hardly has scratched the surface.

Even so, it has had some effect. The State Department has been studying “for some time” methods of keeping out of war. The War Department suddenly decides it has a wonderful plan to spring. The Administration names a committee—with the War and Navy Departments ably represented under the chairmanship of a Wall Street speculator—to limit profits in war time. To what extent isn't suggested. Hmmm. Possibly the profits of 300 and 600 and 1,600 per cent of those who turned blood into gold in the World War would be limited to some smaller figure.

Apparently, however, the plan does not call for any limitation of losses—that is, the losses of those who fight the war. As far as I have been able to ascertain there is nothing in the scheme to limit a soldier to the loss of but one eye, or one arm, or to limit his wounds to one or two or three. Or to limit the loss of life.

There is nothing in this scheme, apparently, that says not more than twelve per cent of a regiment shall be wounded in battle, or that not more than seven per cent in a division should be killed.

Of course, the committee cannot be bothered with such trifling matters.

CHAPTER THREE

Who Pays The Bills?

WHO provides the profits—these nice little profits of 20, 100, 300, 1,500, and 1,800 per cent? We all pay them—in taxation. We paid the bankers their profits when we bought Liberty Bonds at \$100 and sold them back at \$84 or \$86 to the banker. These bankers collected \$100 plus. It was a simple manipulation. The bankers control the security marts. It was easy for them to depress the price of these bonds. Then all of us—the people—got frightened and sold the bonds at \$84 or \$86. The bankers bought them. Then these same bankers stimulated a boom and government bonds went to par—and above. Then the bankers collected their profits.

But the soldier pays the biggest part of the bill

If you don't believe this, visit the American cemeteries on the battlefields abroad. Or visit any of the veterans' hospitals in the United States. On a tour of the country, in the midst of which I am at the time of this writing, I have visited eighteen government hospitals for veterans. In them are a total of about 50,000 destroyed men—men who were the pick of the nation eighteen years ago. The very able chief surgeon at the government hospital at Milwaukee, where there are 3,800 of the living dead, told me that mortality among veterans is three times as great as among those who stayed at home.

Boys with a normal viewpoint were taken out of the fields and offices and factories and classrooms and put into the ranks. There they were remolded; they were made over; they were made to "about face"; to regard murder as the order of the day. They were put shoulder to shoulder and, through mass psychology, they were entirely changed. We used them for a couple of years and trained them to think nothing at all of killing or of being killed.

Then, suddenly, we discharged them and told them to make another "about face"! This time they had to do their own readjusting, sans mass psychology, sans officers' aid and advice, sans nation-wide propaganda. We didn't need them any more. So we scattered them about without any "three-minute" or "Liberty Loan" speeches or parades.

Many, too many, of these fine young boys are eventually destroyed, mentally, because they could not make that final "about face" alone.

In the government hospital at Marion, Indiana, 1,800 of these boys are in pens! Five hundred of them in a barracks with steel bars and wires all around outside the buildings and on the porches. These already have been mentally destroyed. These boys don't even look like human beings. Oh, the looks on their faces! Physically, they are in good shape; mentally, they are gone.

There are thousands and thousands of these cases, and more and more are coming in all the time. The tremendous excitement of the war, the sudden cutting off of that excitement—the young boys couldn't stand it.

That's a part of the bill. So much for the dead—they have paid their part of the war profits. So much for the mentally and physically wounded—they are paying now their share of the war profits. But the others paid, too—they paid with heartbreaks when they tore themselves away from their firesides and their families to don the uniform of Uncle Sam—on which a profit had been made. They paid another part in the training camps where they were regimented and drilled while others took their jobs and their places in the lives of their communities. They paid for it in the trenches where they shot and were shot; where they went hungry for days at a time; where they slept in the mud and in the cold and in the rain—with the moans and shrieks of the dying for a horrible lullaby.

But don't forget—the soldier paid part of the dollars and cents bill too.

Up to and including the Spanish-American War, we had a prize system, and soldiers and sailors fought for money. During the Civil War they were paid bonuses, in many instances, before they went into service. The government, or states, paid as high as \$1,200 for an enlistment. In the Spanish-American War they gave prize money. When we captured any vessels, the soldiers all got their share—at least, they were supposed to. Then it was found that we could reduce the cost of wars by taking all the prize money and keeping it, but conscripting the soldier anyway. Then the soldiers couldn't bargain for their labor. Everyone else could bargain, but the soldier couldn't.

Napoleon once said, "All men are enamored of decorations... they positively hunger for them."

So, by developing the Napoleonic system—the medal business—the government learned it could get soldiers for less money, because the boys like to be decorated. Until the Civil War there were no medals. Then the Congressional Medal of Honor was handed out. It made enlistments easier. After the Civil War no new medals were issued until the Spanish-American War.

In the World War, we used propaganda to make the boys accept conscription. They were made to feel ashamed if they didn't join the army.

So vicious was this war propaganda that even God was brought into it. With few exceptions our clergymen joined in the clamor to kill, kill, kill. To kill the Germans. God is on our side...t is His will that the Germans be killed.

And in Germany, the good pastors called upon the Germans to kill the allies...to please the same God. That was a part of the general propaganda, built up to make people war conscious and murder conscious.

Beautiful ideals were painted for our boys who were sent out to die. This was the "war to end wars." This was the "war to make the world safe for democracy." No one told them that dollars and cents were the real reason. No one mentioned to them, as they marched away, that their going and their dying would mean huge war profits. No one told these American soldiers that they might be shot down by bullets made by their own brothers here. No one told them that the ships on which they were going to cross might be torpedoed by submarines built with United States patents. They were just told it was to be a "glorious adventure."

Thus, having stuffed patriotism down their throats, it was decided to make them help pay for the war, too. So, we gave them the large salary of \$30 a month!

All they had to do for this munificent sum was to leave their dear ones behind, give up their jobs, lie in swampy trenches, eat canned willy (when they could get it) and kill and kill and kill... and be killed.

But wait!

Half of that wage (just a little more in a month than a riveter in a shipyard or a laborer in a

munitions factory safe at home made in a day) was promptly taken from him to support his dependents, so that they would not become a charge upon his community. Then we made him pay what amounted to accident insurance—something the employer pays for in an enlightened state—and that cost him \$6 a month. He had less than \$9 a month left.

Then, the most crowning insolence of all—he was virtually blackjacked into paying for his own ammunition, clothing, and food by being made to buy Liberty Bonds at \$100 and then we bought them back—when they came back from the war and couldn't find work—at \$84 and \$86. And the soldiers bought about \$2,000,000,000 worth of those bonds!

Yes, the soldier pays the greater part of the bill. His family pays it too. They pay it in the same heart-break that he does. As he suffers, they suffer. At nights, as he lay in the trenches and watched shrapnel burst about him, they lay home in their beds and tossed sleeplessly—his father, his mother, his wife, his sisters, his brothers, his sons, and his daughters.

When he returned home minus an eye, or minus a leg or with his mind broken, they suffered too—as much as and even sometimes more than he. Yes, and they, too, contributed their dollars to the profits that the munitions makers and bankers and shipbuilders and the manufacturers and the speculators made. They, too, bought Liberty Bonds and contributed to the profit of the bankers after the Armistice in the hocus-pocus of manipulated Liberty Bond prices.

And even now the families of the wounded men and of the mentally broken and those who never were able to readjust themselves are still suffering and still paying.

CHAPTER FOUR

How To Smash This Racket!

WELL, it's a racket, all right.

A few profit—and the many pay. But there is a way to stop it. You can't end it by disarmament conferences. You can't eliminate it by peace parlays at Geneva. Well-meaning but impractical groups can't wipe it out by resolutions. It can be smashed effectively only by taking the profit out of war.

The only way to smash this racket is to conscript capital and industry and labor before the nation's manhood can be conscripted. One month before the Government can conscript the young men of the nation—it must conscript capital and industry and labor. Let the officers and the directors and the high-powered executives of our armament factories and our steel companies and our munitions makers and our shipbuilders and our airplane builders and the manufacturers of all the other things that provide profit in war time as well as the bankers and the speculators, be conscripted—to get \$30 a month, the same wage as the lads in the trenches get.

Let the workers in these plants get the same wages—all the workers, all presidents, all

executives, all directors, all managers, all bankers—yes, and all generals and all admirals and all officers and all politicians and all government office holders—everyone in the nation to be restricted to a total monthly income not to exceed that paid to the soldier in the trenches!

Let all these kings and tycoons and masters of business and all those workers in industry and all our senators and governors and mayors pay half of their monthly \$30 wage to their families and pay war risk insurance and buy Liberty Bonds.

Why shouldn't they?

They aren't running any risk of being killed or of having their bodies mangled or their minds shattered. They aren't sleeping in muddy trenches. They aren't hungry. The soldiers are!

Give capital and industry and labor thirty days to think it over and you will find, by that time, there will be no war. That will smash the war racket—that and nothing else.

Maybe I am a little too optimistic. Capital still has some say. So capital won't permit the taking of the profit out of war until the people—those who do the suffering and still pay the price—make up their minds that those they elect to office shall do their bidding, and not that of the profiteers.

Another step necessary in this flight to smash the war racket is a limited plebiscite to determine whether war should be declared. A plebiscite not of all the voters but merely of those who would be called upon to do the fighting and the dying. There wouldn't be very much sense in having the 76-year-old president of a munitions factory or the flat-footed head of an international banking firm or the cross-eyed manager of a uniform manufacturing plant—all of whom see visions of tremendous profits in the event of war—voting on whether the nation should go to war or not. They never would be called upon to shoulder arms—to sleep in a trench and to be shot. Only those who would be called upon to risk their lives for their country should have the privilege of voting to determine whether the nation should go to war.

There is ample precedent for restricting the voting to those affected. Many of our states have restrictions on those permitted to vote. In most, it is necessary to be able to read and write before you may vote. In some, you must own property. It would be a simple matter each year for the men coming of military age to register in their communities as they did in the draft during the World War and to be examined physically. Those who could pass and who would therefore be called upon to bear arms in the event of war would be eligible to vote in a limited plebiscite. They should be the ones to have the power to decide—and not a Congress few of whose members are within the age limit and fewer still of whom are in physical condition to bear arms. Only those who must suffer should have the right to vote.

A third step in this business of smashing the war racket is to make certain that our military forces are truly forces for defense only.

At each session of Congress the question of further naval appropriations comes up. The

swivel-chair admirals of Washington (and there are always a lot of them) are very adroit lobbyists. And they are smart. They don't shout that "We need a lot of battleships to war on this nation or that nation." Oh, no. First of all, they let it be known that America is menaced by a great naval power. Almost any day, these admirals will tell you, the great fleet of this supposed enemy will strike suddenly and annihilate our 125,000,000 people. Just like that. Then they begin to cry for a larger navy. For what? To fight the enemy? Oh my, no. Oh, no. For defense purposes only.

Then, incidentally, they announce maneuvers in the Pacific. For defense. Uh, huh.

The Pacific is a great big ocean. We have a tremendous coastline on the Pacific. Will the maneuvers be off the coast, two or three hundred miles? Oh, no. The maneuvers will be two thousand, yes, perhaps even thirty-five hundred miles, off the coast.

The Japanese, a proud people, of course will be pleased beyond expression to see the United States fleet so close to Nippon's shores. Even as pleased as would be the residents of California were they to dimly discern, through the morning mist, the Japanese fleet playing at war games off Los Angeles.

The ships of our navy, it can be seen, should be specifically limited, by law, to within 200 miles of our coastline. Had that been the law in 1898 the Maine would never have gone to Havana Harbor. She never would have been blown up. There would have been no war with Spain with its attendant loss of life. Two hundred miles is ample, in the opinion of experts, for defense purposes. Our nation cannot start an offensive war if its ships can't go farther than 200 miles from the coastline. Planes might be permitted to go as far as 500 miles from the coast for purposes of reconnaissance. And the army should never leave the territorial limits of our nation.

To summarize: Three steps must be taken to smash the war racket.

We must take the profit out of war. We must permit the youth of the land who would bear arms to decide whether or not there should be war. We must limit our military forces to home defense purposes.

CHAPTER FIVE

To Hell With War!

I am not a fool as to believe that war is a thing of the past. I know the people do not want war, but there is no use in saying we cannot be pushed into another war.

Looking back, Woodrow Wilson was re-elected president in 1916 on a platform that he had "kept us out of war" and on the implied promise that he would "keep us out of war." Yet, five months later he asked Congress to declare war on Germany.

In that five-month interval the people had not been asked whether they had changed their

minds. The 4,000,000 young men who put on uniforms and marched or sailed away were not asked whether they wanted to go forth to suffer and die.

Then what caused our government to change its mind so suddenly?

Money.

An allied commission, it may be recalled, came over shortly before the war declaration and called on the President. The President summoned a group of advisers. The head of the commission spoke. Stripped of its diplomatic language, this is what he told the President and his group:

“There is no use kidding ourselves any longer. The cause of the allies is lost. We now owe you (American bankers, American munitions makers, American manufacturers, American speculators, American exporters) five or six billion dollars.

If we lose (and without the help of the United States we must lose) we, England, France and Italy, cannot pay back this money ... and Germany won't.

So...”

Had secrecy been outlawed as far as war negotiations were concerned, and had the press been invited to be present at that conference, or had radio been available to broadcast the proceedings, America never would have entered the World War. But this conference, like all war discussions, was shrouded in utmost secrecy. When our boys were sent off to war they were told it was a “war to make the world safe for democracy” and a “war to end all wars.”

Well, eighteen years after, the world has less of democracy than it had then. Besides, what business is it of ours whether Russia or Germany or England or France or Italy or Austria live under democracies or monarchies? Whether they are Fascists or Communists? Our problem is to preserve our own democracy.

And very little, if anything, has been accomplished to assure us that the World War was really the war to end all wars.

Yes, we have had disarmament conferences and limitations of arms conferences. They don't mean a thing. One has just failed; the results of another have been nullified. We send our professional soldiers and our sailors and our politicians and our diplomats to these conferences. And what happens?

The professional soldiers and sailors don't want to disarm. No admiral wants to be without a ship. No general wants to be without a command. Both mean men without jobs. They are not for disarmament. They cannot be for limitations of arms. And at all these conferences, lurking in the background but all-powerful, just the same, are the sinister agents of those who profit by war. They see to it that these conferences do not disarm or seriously limit armaments.

The chief aim of any power at any of these conferences has not been to achieve disarmament to prevent war but rather to get more armament for itself and less for any potential foe.

There is only one way to disarm with any semblance of practicability. That is for all nations to get together and scrap every ship, every gun, every rifle, every tank, every war plane. Even this, if it were possible, would not be enough.

The next war, according to experts, will be fought not with battleships, not by artillery, not with rifles and not with machine guns. It will be fought with deadly chemicals and gases.

Secretly each nation is studying and perfecting newer and ghastlier means of annihilating its foes wholesale. Yes, ships will continue to be built, for the shipbuilders must make their profits. And guns still will be manufactured and powder and rifles will be made, for the munitions makers must make their huge profits. And the soldiers, of course, must wear uniforms, for the manufacturer must make their war profits too.

But victory or defeat will be determined by the skill and ingenuity of our scientists.

If we put them to work making poison gas and more and more fiendish mechanical and explosive instruments of destruction, they will have no time for the constructive job of building greater prosperity for all peoples. By putting them to this useful job, we can all make more money out of peace than we can out of war — even the munitions makers.

So...I say,

TO HELL WITH WAR!

additional comment

"I helped make Mexico, especially Tampico, safe for American oil interests in 1914. I helped make Haiti and Cuba a decent place for the National City Bank boys to collect revenues in. I helped in the raping of half a dozen Central American republics for the benefits of Wall Street. The record of racketeering is long. I helped purify Nicaragua for the international banking house of Brown Brothers in 1909-1912. I brought light to the Dominican Republic for American sugar interests in 1916. In China I helped to see to it that Standard Oil went its way unmolested.

Thanksgiving

the real history of the first Thanksgiving

early Thanksgivings

The first European Thanksgiving in North America was in 1565 between Spanish settlers and the Seloy tribe in what is now Florida. The meal was salted pork, garbanzo beans, and bread.

Thanksgiving was celebrated by British colonists in 1619 in Berkeley Hundred in what is now Virginia. The meal was oysters and ham.

The Pilgrims claimed their first Thanksgiving was in 1623.

Massachusetts Bay Colony Governor John Winthrop celebrated Thanksgiving in 1637. That meal was to honor colonial soldiers for killing hundreds of Pequot men, women, and children in what is now Mystic, Connecticut. Some people credit this as the first Thanksgiving.

the first Pilgrim Thanksgiving

Frank James, an Aquinnah Wampanoag activist who helped establish a National Day of Mourning in 1970, called the Wampanoag's welcoming of the English settlers "perhaps our biggest mistake."

Massasoit, the Wampanoag chief, sent soldiers to investigate gun shots. That turned out to be the Pilgrims celebrating Thanksgiving. Those 90 soldiers are the ones mentioned in Pilgrim accounts.

The Native Americans were not invited to the meal. They showed up to find out why there were gunshots fired.

Prior to that, earlier European visitors had spread European diseases. By 1620, 90% of the Native population of New England had died of "Indian fever".

Ousamequin, sachem (chief) of the Wampanoag, sent by Massasoit, the Wampanoag paramount chief, negotiated an alliance between the Wampanoag and the Pilgrims against the French, the Narragansetts, and other Native American nations.

As thousands more English colonists moved to Plymouth, the Pilgrims betrayed their allies.

The English colonists seized Wampanoag land, spread disease, exploited resources on Wampanoag land, enslaved and executed Wampanoags, and carried out multiple massacres.

Some of the most famous English brutality included the Pequot Massacre of 1636 and the beheading of Wampanoag chief Metacom in 1676.

After 50 years of English imperialism, Massasoit's son, Metacomet (whom the English called "King Philip"), fought a war that devastated the Wampanoag.

Sarah Josepha Hale

Sarah Hale was a school teacher in Newport, New Hampshire.

She wrote short songs for new students to make them feel welcome. One of those songs is "Mary Had a Little Lamb". There was a real Mary.

Starting in 1846, she wrote to U.S presidents (Zachary Taylor, Millard Fillmore, Franklin Pierce, James Buchanan, and Abraham Lincoln) asking that they name a national day of thanksgiving. At the time the New England states had a Thanksgiving celebration, but each on different days. In 1863 Abraham Lincoln decided that it would be a good idea to keep up morale during the American Civil War.

Much of the standard Thanksgiving meal was set in her novel *Northwood: Or, a Tale of New England*, in which she devoted a chapter to Thanksgiving dishes, including roasted turkey, gravy and savory stuffing, chicken pie, pumpkin pie, cakes, preserves, ginger beer, curarnt wine, and cider.

Abraham Lincoln was responsible for the largest one-day mass execution in American history. A military commission rushed through trials for 2,000 Dakota in less than six weeks, convicting 303 and sentencing them to death. Lincoln reviewed the sentences and approved death penalties for 39.

Native American history

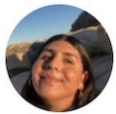
Native American history

“I saw a recent survey that said 6 of 10 U.S. citizens believed Native Americans are extinct. This is both a product and failure of the state education system. So much of the curriculum is designed to erase Natives and teachers focus on stupid ancient tropes (Thanksgiving). So bad”
—[Brett Chapman](#)

“The fact that Native history is mostly relegated to NATURAL history / prehistory museums (with mammoths and other extinct animals) for more than a century is largely to blame. It is not just the poorly educated who learned this way. “Good” schools are taught this way as well.”
—[Joseph A P Wilson](#). Lecturer in Archaeology, Department of Classics, UMASS Amherst

Native American headdresses

Native American headdresses



rue @FRIDAKHALIFA ✓

The native headband thing elementary school teachers make kids do is actually so funny when you remember that those headbands only became a part of popular “Indian” aesthetics because the white actors doing redface in western films needed to hide their wiglines

5:32 PM, Wednesday, November 2022

See original tweet at <https://twitter.com/FRIDAKHALIFA/status/1595591172856348672>.





The following materials are from Native Language of the Americas located on the website <http://www.native-languages.org/> and the web page <http://www.native-languages.org/headdresses.htm>. They require a link back to their website for any materials reprinted. They have information on more than 800 indigenous languages. They are a 501-c-3 non-profit educational organization and any contributions you make are tax-exempt in the United States.

Native American Headdresses: Facts for Kids



When most people think of an American Indian headdress, the first image that comes to mind is a full eagle-feather warbonnet like the Lakota Sioux headdress above. But in fact, American Indians in most tribes never used feather headdresses like these. Feathered warbonnets may be the best-known American Indian headdresses, but they were not the most commonly used-- and they were certainly not the only ones.

Read on for pictures and descriptions of the most important Native American headdress styles of North America and the differences between them.

Native American Warbonnets

Warbonnets (or **war bonnets**) are the impressive feather headdresses commonly seen in Western movies and TV shows. Although warbonnets are the best-known type of Indian headdress today, they were actually only worn by a dozen or so Indian tribes in the Great Plains region, such as the Sioux, Crow, Blackfeet, Cheyenne, and Plains Cree. In the first photograph, you can see a Dakota Sioux warrior wearing a **trailer** warbonnet (native headdress with single or double rows of eagle feathers descending in a long 'tail' all the way to the ground). In the second photo, modern Crow elders attend a formal event in **halo** warbonnets (native headdresses with eagle feathers fanned out around the face in an oval shape). The third photograph shows a Blackfoot man wearing a **straight-up** feather headdress (taller, narrower headdresses where the eagle feathers stand up straight.) All three types of Indian war bonnets were made from the tail feathers of the golden eagle, and each feather had to be earned by an act of bravery. Sometimes a feather might be painted with red dye to commemorate a particular deed. Besides the feathers,

Plains Indian warbonnets were often decorated with ermine skins and fancy beadwork.



trailer war bonnet



halo warbonnet



straight-up warbonnet

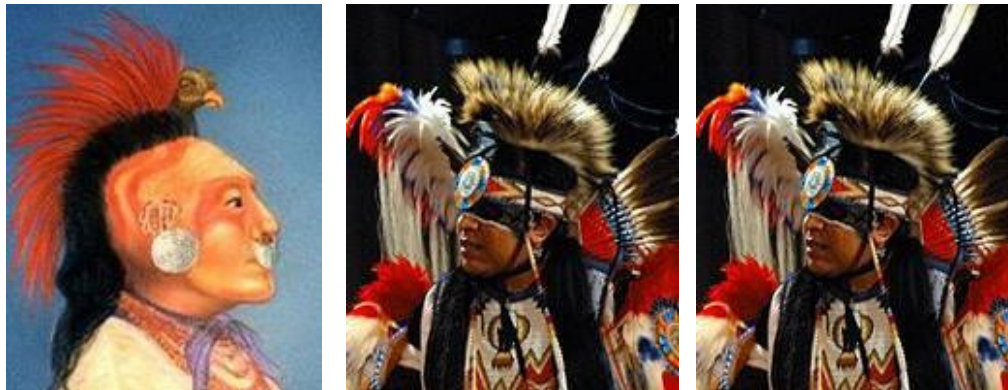
Native American warbonnets were important ceremonial regalia worn only by chiefs and warriors. Also, only men wore warbonnets. (Women sometimes went to war in some Plains Indian tribes, and there were even some female chiefs, but they never wore these masculine headdresses.) Plains Indian men occasionally wore warbonnet headdresses while they were fighting, but more often they wore roach headdresses into battle (see below) and saved their war bonnets for formal occasions. In particular, long feather trailers were never worn on the battlefield. It would be impossible to fight while wearing them!

In the 1800's, Native American men from other tribes sometimes began to wear Plains-style warbonnets. Partially this was because of the American tourist industry, which expected Native Americans to look a certain way. Partially it was because many Native American tribes were forced to move to Oklahoma and other Indian territories during this time in history, so tribes that used to live far apart began adopting customs from their new neighbors. In most cases, the feather warbonnet did not have the same significance among the new tribes that adopted it. For them, wearing a feathered headdress was a matter of fashion or a general symbol of authority. But for the Plains Indian tribes, feather warbonnets were a sacred display of a man's honor and courage, and each feather told a story. Eagle feathers are still sometimes awarded to Plains Indians who serve in the military or do other brave deeds today.

Roach Headdresses (Porcupine Roaches)

Feather warbonnets are better-known to popular culture, but **roach headdresses** (also called **porcupine roaches** or **artificial roaches**) were the most widely used kind of Indian headdress in the United States. Most Native American tribes east of the Rocky Mountains were familiar with some form of roach headdress. These native headdresses are made of stiff animal hair, especially porcupine guard hair, moose hair, and deer's tail hair. This hair was attached to a bone hair ornament or leather base so that it stood straight up from the head like a tuft or crest. Often the hair was dyed bright colors and feathers, shells, or other decorations were attached. In some tribes, men wore their hair in a scalplock or crested roach style (frequently given the name

Mohawk or Mohican after two tribes in which roached hair was common), and the artificial roach was attached to the man's own hair. The Caddo man in the first picture is wearing his roach headdress this way. In other tribes, porcupine roaches were attached to leather headbands or thongs and worn over long hair or braids. This is how they are most commonly worn today.



Caddo warrior's roach powwow dancer's roach Indian roach for sale

Roach headdresses were usually worn by warriors and dancers. Like war-bonnets, the porcupine hair roach is traditionally men's headwear, not worn even by female warriors. Their use varied from tribe to tribe. In many tribes, roaches were worn into battle, while more formal tribal headdresses (like warbonnets, otter-fur turbans, or gustowah caps) were worn to ceremonial events. In other tribes, roaches were worn primarily as dance regalia or sports costume. In some tribes, individual men chose to wear porcupine roaches while other men did not. Like other clothing styles, roaches sometimes went into and out of fashion. They were not generally as spiritually meaningful as Native American warbonnet headdresses, though a boy earning the right to wear a roach for the first time was an important ceremony in some tribes. Today, porcupine roaches can be commonly seen at powwows, where they are still worn as regalia by male dancers from many different tribes.

Basket Hats

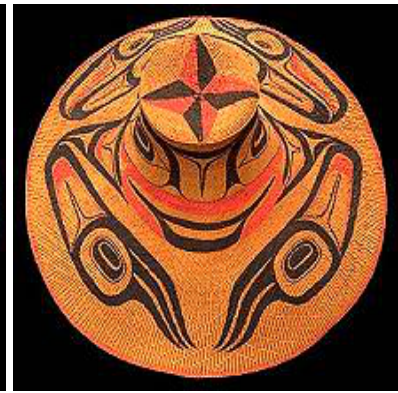
Basket hats (also known as **twined caps** or **basketry hats**) were the most common type of Native American headdress west of the Rocky Mountains. Different tribes made basket hats in different shapes and styles. California Indian tribes usually made small rounded or fez-shaped basket caps from tightly coiled sumac, like the Hupa Indian hat below. Northwest Coast tribes like the Haida and Salish often made larger hats in more conical or brimmed shapes from fibers such as cedar bark or spruce root.



Hupa basket cap



Haida basket hat



Nootka whaler's hat

In California and the Plateau tribes, basket hats were normally worn only by women and girls, and their designs were mostly decorative. On the Northwest Coast, both men and women wore basketry headgear, for dance regalia and ceremonial purposes as well as everyday life. Northwest Coast basket hat designs often conveyed information about a person's clan, achievements, or status within the tribe.

Feather Headbands

The **Indian headband** is also well-known from movies and other popular images of Native Americans. However, this style of headband was typically only used by a few tribes of the northeast Woodlands. Usually the headband consisted of a finger-woven or beaded deerskin strip with tribal designs on it. This band was then tied around the brow with a feather or two tucked through the back. Not only eagle feathers but turkey, hawk, egret, and crane feathers were also used for Woodland Indian headbands.



Abenaki headbands



Lenape Indian headbands

Unlike many of the Native American headdresses on this page, both men and women wore headbands, which were not associated with war. The number and type of feather did not usually have special symbolic meaning, though in a few tribes that bordered the Plains eagle feathers were reserved for warriors. For the most part, Woodland Indian head bands were worn for their

beauty, and were often decorated with intricate patterns, wampum, beads, and quillwork.

Buffalo Headdresses (Horned Warbonnets)

Like feather war bonnets, **buffalo horn headdresses** were traditional regalia of certain Plains Indian warriors. These were helmets of buffalo hide with a pair of buffalo horns attached, frequently adorned with shaggy buffalo fur and a buffalo tail trailing behind. In many cases ermineskins and war feathers were hung from the headdress, as in the second picture. Sometimes a horned headdress was even combined with a feather trail, as in the third picture.



Sioux buffalo headdress Piegan horn headdress Buffalo warbonnet

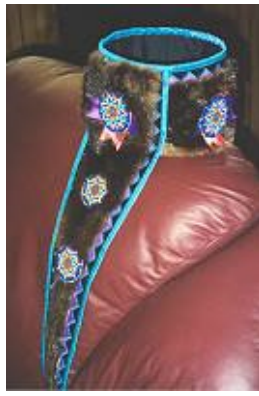
The spiritual and ceremonial importance of horned headdresses to the Plains Indians was similar to that of feathered warbonnets. Only distinguished male warriors wore this sacred kind of regalia. Horned headdresses were rarer than eagle-feather warbonnets, because they were used by fewer tribes (only the Sioux and a few other tribes of the northern Plains wore this kind of headdress) and also because only warriors of certain clans or who had accomplished specific deeds wore bison horns.

Otter Fur Turbans

Otter-fur turbans (also known as **otter-skin caps**) are ceremonial headdresses worn by men in certain Prairie and Southern Plains tribes, such as the Potawatomi, Pawnee and Osage. These are round hats made of otter fur with the otter's tail either hanging behind or jutting out to one side in a beaded sheath. The turbans and tail sheaths were often elaborately decorated with beaded and painted designs symbolizing the owner's war honors, and a chief and his descendants usually attach eagle feathers to the back of their turbans.



Pawnee chief's turban



Otter turban



Otter cap with sheath

Otter-skin turbans were formal head dresses with great symbolic importance. They were worn at ceremonies or other solemn occasions, not by warriors entering battle (who usually wore porcupine roaches.) Even today, otter-fur caps are sometimes worn at formal events by Southern Plains Indian men.

Mexican, Central and South American Headdresses

The Aztec and Highland Maya Indians of Mexico were also famous for their **feather headdresses**, but these headdresses looked very different from the Plains Indian warbonnets. To make their native headdresses, the Aztecs and Mayans sewed together a large fan of feathers and then attached it to the back of their head with straps and a headband or metal circlet. Another difference is that parrot, macaw, and quetzal feathers were used instead of eagle feathers. This style of Indian feather headdress was not only popular in Mexico but also in Central America and in parts of South America as far south as Brazil.



Montezuma's Aztec headdress



Mexican headdress



Brazilian headdress

Both men and women wore Indian headdresses like these. They didn't have any connection to war, but in the Aztec Empire, the fanciest ones (adorned with gold, jewels, and jade stone) symbolized nobility. Today, feather-fan headdresses are worn as regalia by Nahua, Mayan, and other native dancers in Mexico and Guatemala, and colorful headdresses modelled on traditional

Brazilian Indian ones are worn as costumes for Mardi Gras Carnival in Rio de Janeiro every year.

American Indian Masks

Masks are another kind of headgear used by many Native American tribes from Alaska to Argentina. In most tribes, masks are used for religious rituals or festivals, but there are nearly as many different American Indian mask-making traditions as there are American Indian tribes. We have a separate page of [Native American masks](#) that you may like to visit to learn more about the diversity of tribal masks, but here are photographs of a few of the most common types. Plains Indians typically crafted simple **animal masks** from the heads or skulls of important animals such as the buffalo bull, bear or wolf. Most tribes carved masks from wood and decorated them with leather and fur, like the Hopi **kachina dance mask** below. In some of the northwestern tribes, mask makers carved particularly complex **hinged transformation masks** that opened when a cord was pulled to reveal a second face within the first one. Metal masks were rare in North America but some South American tribes, like the Inca tribe, created beautiful **beaten gold and silver masks**. And in some eastern tribes like the Seneca and Tuscarora tribes, making **false face masks** is considered such a sacred ritual that no one is allowed to take photographs of them.



Mandan buffalo dance mask



Hopi kachina mask



Haida transformation mask



Incan sun mask

Other Tribal Headdresses for Men



Iroquois gustowah cap



Hupa clicker headdress



Seminole cloth turban



Pueblo headband

The **gustoweh cap** is a formal feathered skullcap used only by men from the Iroquois tribes. The big eagle feathers on top of the cap were symbols that showed which specific tribe an Iroquois man belonged to. (The three straight feathers on the cap in this picture mean that the owner is Mohawk.) In some northern California tribes, men wore **flicker headdresses** as dance regalia. These California Indian headdresses are made of wide leather strips decorated with the red scalps of woodpeckers. During the 1800's when cloth became more readily available, **cloth turbans** decorated with feathers became stylish among Cherokee, Seminoles and other southeastern Indian men, and **cloth headbands** became everyday wear for men from the Navajo, Apache, and Pueblo tribes.

Other Tribal Headdresses for Women



Cayuga beaded tiara Peaked hood



Wishram bridal headdress Eskimo dance headdress

Iroquois ladies often wore a distinctive **tiara** style of beaded headband. This high crown-like headdress is still used at formal events today. Wabanaki women in Maine and New Brunswick sometimes wore **peaked caps** with a floral bead design. In many Plateau tribes, brides wore elaborate **beaded head coverings** like the Wishram woman above, crafted from dentalium shells, abalone, and other precious materials. The Eskimo people (Inuit, Aleut, and Yupik) did not normally wear headdresses, but women did use **headbands with long fringes**, sometimes ringed with caribou fur like the one in this picture, as dance regalia.

Answers to Common Questions about Native American Headdresses

Did Native American children wear the headdresses on this page?



Hochunk child's headband

Traditionally, no. Most of these headdresses were never worn by children. Native American boys usually began wearing porcupine roaches as teenagers, when they were ready to become warriors. Feathered war bonnets, buffalo headdresses, and otter-tail hats were worn by men who were already good warriors and had earned honors. Most other Indian masks and headdresses were worn only by adults for special ceremonies or dances. Some California Indian girls did wear basket hats, and on the east coast, some children wore headbands (though usually without any feathers in them.)

Today, Native American children often wear ethnic dance headdresses at powwows and other cultural festivals. The most common are beaded headbands like the one this Ho-Chunk child is wearing. But in some tribes, even young children wear Indian roaches as dance regalia today.

Was there a special kind of Indian headdress used by princesses?

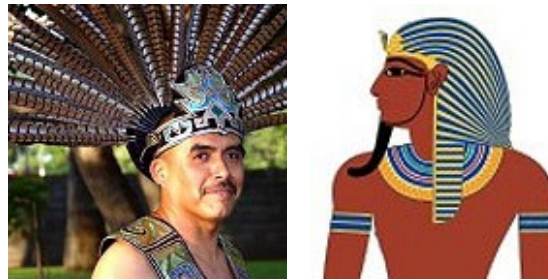


Mayan queen's headdress

Not in the tribes of the U.S. or Canada. Almost none of these tribes had royalty the way Europeans did-- a chief's daughter was more like a general's daughter or a governor's daughter than a princess, and she did not wear a crown or other special clothing.

Many Mexican Indian tribes had royal families, however. The wives, sisters, and daughters of Mexican Indian kings and emperors wore feather headdresses adorned with gold, jade, and jewels just like the male members of their families did. This is a stone carving of a Mayan queen wearing a royal feather headdress.

Is it true that Aztec and Mayan headdresses resemble the headdresses of Egyptian pharaohs?



Aztec headdress Egyptian headdress

No, this is false. Probably this rumor got started because the Aztecs and Mayas, like the ancient Egyptians, built pyramids. But their headdresses have nothing in common at all. As you can see here, Aztec and Maya Indians wore large fan-shaped feather headdresses. Egyptian headdresses were made of draped cloth or of a reed frame with cloth stretched over it into a high crown shape. Here is an extensive website where you can see the different kinds of [Egyptian crowns and headdresses](#). They didn't look anything like the Aztec and Maya ones.

Where can I buy a Native American headdress or find instructions to make my own?



Porky roach for sale

On our [Native American regalia page](#), you can find links to tribal members who make dance roaches and other ceremonial Indian clothing. A good place to buy kits for making your own porky roaches or other dance accessories is the well-known pow-wow vendor [Crazy Crow](#).

If you are not Native American but are just trying to make a native headdress for an art project, we recommend making a beaded headband, since headbands do not have the same sacred meaning of many other Native American Indian headdresses and do not require you to understand complex cultural traditions to create one properly. The book [North American Indian Beadwork Patterns](#) includes a nice pattern for beading a Native American headband.

Recommended Native American Headdress Books

Our organization earns a commission from any book bought through these links [The original links from the native-languages.org website are maintained.]

[Encyclopedia of American Indian Costume](#)

A good book about clothing and regalia in different tribes, including native headdress styles.

[The Plains Warbonnet: Its Story and Construction](#)

Detailed book about the history and importance of the Native American war bonnet.

[Warbonnets](#)

Another book about Plains Indian feather headdresses.

[Powwow](#)

Beautiful photographic book of powwow regalia, including dance roaches and other Indian headdresses.

Further Reading

[Infinity of Nations: Native Headdress](#)

Online museum exhibit of American Indian headdresses from North, Central, and South America.

[Porcupine Hair Roach](#)

History and construction of roach headdresses, with many old photographs.

[Pow Wow Images](#) ♦ [Intertribal Pow-Wow Photo Gallery](#) ♦ [Gathering of Nations Powwow Pictures](#)

Powwow picture galleries, displaying the native headdress and other regalia of the dancers.

[Native American War Bonnets](#) ♦ [Porcupine Hair Roaches](#) ♦ [Native Roach Headdresses](#)

Native American Indian headdresses for sale online by tribal artists.

The above materials are from Native Language of the Americas located on the website <http://www.native-languages.org/> and the web page <http://www.native-languages.org/headdresses.htm>. They require a link back to their website for any materials reprinted. They have information on more than 800 indigenous languages. They are a 501-c-3 non-profit educational organization and any contributions you make are tax-exempt in the United States.

Native American funding

Native American funding

from [Partnership with Native Americans](#)

5 NATIVE AMERICAN FUNDING FACTS

Many people believe the U.S. government meets the needs of Native Americans through treaty benefits and entitlements. They perceive Native Americans receive free housing, healthcare, education, and food; government checks each month, and income without the burden of taxes. Reality is that federal treaty obligations are often unmet and almost always underfunded, and many Native families are struggling. Here are five facts to know about Native funding in the U.S.

Fact 1: Free Housing

Although the BIA has a large budget to serve the 574 federally recognized tribes (about \$2 billion a year), it has been cited as the least effective government agency and the most mismanaged. About 68% of BIA funding is directly used in behalf of the tribes, most of it in the form of contracts, grants or compacts involving social services, job training, school facilities, some housing improvement, and other land and management concerns. And tribal self-determination and self-governance programs have eclipsed direct services being provided by the BIA and BIE, which is good news. Still, 32% of BIA funding goes to operate the Office of Indian Services for disaster relief, child welfare, education, tribal government, reservation roads, general

assistance and Indian Self-Determination; the Office of Justice Services for law enforcement, tribal courts and detention facilities on tribal lands; the Office of Trust Services for management of trust lands, assets and resources; and the Office of Field Operations with 4 central offices, 12 regional offices and 83 agencies that carry out the BIA's mission at the tribal level. At least 80% of the 7,000+ employees are Native or Alaskan Indian.

Although the BIA has assisted Native American families with housing, these homes are not free. It is common for Native families on the reservations to make housing payments to the BIA. Housing and Urban Development (HUD) has also funded some Native housing and home repairs. Still, according to the National American Indian Housing Council, some 90,000 American Indian families are homeless or under-housed, and 40% of on-reservation housing is inadequate.

Fact 2: American Indian Education

Under the treaties, the federal government promised an education for all Native Americans. Some treaties spell out the promise of an education system — essentially meaning secondary schools, not a free ride to college. As such, the Bureau of Indian Education operates 2 colleges and administers grants for 29 tribally-controlled colleges. They also operate 169 elementary and secondary schools across 63 reservations and 14 dorms serving approximately 46,000 Native students in 23 states. Although the BIE's mission is to provide quality education opportunities to Indian students, BIE schools are notoriously underfunded and underperforming, with their educational outcomes and graduation rates significantly lower than public schools.

At the college level, Native American students must compete for scholarships along with other Americans. Today more Native American students hope to attend college, but only 17% start college and only 16% have a college degree, often due to a lack of funding.

Fact 3: Casino Riches

A “casino payout” occurs when tribes disburse unused profits from Indian gaming to individual tribal members for their personal use. However, simply operating a casino does not guarantee tribal riches or mean that tribal members receive such payouts. Contrary to popular belief, fewer than 15% of Indian tribes operate prosperous casinos. In addition, only the 574 federally recognized tribes are eligible to operate casinos, more than 400 tribes in the U.S. are not federally recognized.

The National Indian Gaming Commission reports only 245 tribes in 29 states operate casinos (as of 2019). Of these, about one-third earn less than \$3 million in revenue, and a third have \$10-25 million in revenue (enough to give per capita payouts, depending on the needs of each tribe and federal approval). Research shows that casinos need to be within 50 miles of a metro area (with 10,000 or more residents) to be highly profitable such as the 15% mentioned above.

In PWNA's experience, the rural and remote casinos do not have enough traffic to generate large profits — they do create a few tribal jobs. We also see some tribes that are prospering from

gaming assisting other tribes that are struggling economically, but it's important to remember that even this use of gaming profit is regulated by the federal government.

Fact 4: Government Checks

The Bureau of Indian Affairs (BIA) does not disburse cash to individuals, and contrary to popular belief, the U.S. government does not mail out basic assistance checks to people simply because they are Native American. Many tribal members are veterans or disabled or retired after years of serving as railroad workers, artists and educators, in tribal jobs, or in general labor. These people receive V.A. or disability or social security checks from the government, as would any other American.

Throughout PWNA's service area, the main forms of governmental aid seem to be energy assistance and food commodities (arising from treaties and connected with loss of reservation lands and natural food sources). TANF is also available for single mothers but often requires them to volunteer for 40 hours a week in a supervised work program leading to job placement. Other social programs such as WIC and SNAP (food stamps) are available on the reservations; these are the same programs available to all Americans, with allocations based on demonstrated need.

Fact 5: Native Americans and Taxes

Like all Americans, Native Americans pay federal income tax on any income they earn, including casino earnings. They do not pay state tax for income earned within reservation boundaries.

It is also important to understand that the lack of available jobs on the reservations fuel joblessness at 35% to 85% and a poverty rate of 15% to 54% (varies by reservation). It is not for lack of exuberance or effort on the part of Native Americans that these conditions exist. Many of the hardest working folks we know are Native American. Rather, outside business is reluctant to invest in small, remote, and rugged reservation communities and doing so is complex given that tribal land is held in trust for the tribes but owned by the federal government, and all businesses and investors must comply with federal, state and tribal regulations. As a result, most jobs on the reservations are tribal, government, or state jobs with restrictive and historic budget cuts that limit opportunities for growth.

from [Partnership with Native Americans](#)

helping Native Americans

what can you do?



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123K Tweets





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@MsKellyMHayes

Abolitionist writer & organizer. Abortion doula. Menominee. Hosts [@truthout](#)'s Movement Memos podcast. Patreon: patreon.com/KellyHayes More: linktr.ee/KellyHayes

 Chicago  kellyhayes.org  Joined January 2011

4,225 Following 64.1K Followers



Puff the Magic Hater @MsKellyMHayes ✓

Every year I invite people who are celebrating the colonial holiday to do something in support of Native people. Indigenous people in the U.S. experience some of the worst rates of illness, poverty & unemployment. To make matters worse, Native families are under attack. (THREAD)

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://twitter.com/MsKellyMHayes/status/1595415625999974403>.



Puff the Magic Hater @MsKellyMHayes ✓

The Indian Child Welfare Act is under attack, which threatens Native families, Native sovereignty and much more. @NativeChildren helps to protect Native children and keep them connected to their families, community and culture.

<https://www.nicwa.org/donate-online/>

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://twitter.com/MsKellyMHayes/status/1595415627979968512>.



Puff the Magic Hater @MsKellyMHayes ✓

On my own reservation, Woodland Women is an elder-led group that creates space for mutual support and healing. They hold community talking circles, practice mutual aid, offer free beading classes and share Menominee cultural knowledge. I love these women.

https://www.gofundme.com/f/maeqtekuahkihiw-metaemohsak-woodland-women?member=23450879&sharetype=teams&utm_campaign=p_na+share-sheet&utm_medium=copy_link&utm_source=customer

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://twitter.com/MsKellyMHayes/status/1595415630219706368>.



Puff the Magic Hater @MsKellyMHayes ✓

.@IWRising's initiatives include financial and practical support for Indigenous abortion

seekers in the US & Canada, midwifery support & advocacy surrounding repro justice related issues. To donate to their abortion fund: https://www.powr.io/checkout_screen?unique_label=a667f04d_1592798443

https://www.powr.io/checkout_screen?unique_label=a667f04d_1592798443

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://twitter.com/MsKellyMHayes/status/1595415632081715201>.



Puff the Magic Hater @MsKellyMHayes ✓

. @4directionsvote throws down hard to register Native people to vote, to get Native people to the polls, and to fight voter suppression. They're on the ground in GA right now. These folks have a massive impact. To help keep Native organizers on the ground:

<https://secure.actblue.com/donate/fourdirections2019>

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://twitter.com/MsKellyMHayes/status/1595415633629437952>.



Puff the Magic Hater @MsKellyMHayes ✓

.@Chi_Nations is a diverse group of Native youth activists who steward the First Nations Garden, which is an important radical Indigenous space here in Chicago.

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://chinations.org/donate/>.




Puff the Magic Hater @MsKellyMHayes ✓

My collective is sponsoring survival stipends for individual Indigenous organizers. Indigenous activists on our list include a traditional birth worker who serves rural communities, a longtime healer and land defender & a Native mother about to be evicted.

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://liftedvoices.networkforgood.com/projects/177265-help-us-provide-survival-stipends-for-indigenous-activists>.



Puff the Magic Hater @MsKellyMHayes 

Indigenous Justice does a lot of beautiful work supporting the families of MMIW & MMIR, using mutual aid, protest and traditional lifeways as modes of healing. They also work to expose and address disparities in California's carceral system.

5:55 AM, Wednesday, 23 November 2022

See original tweet at <https://secure.actblue.com/donate/indigenous-justice-1>.

American Indian Wars

American Indian Wars

Battle of Mabila, October 1540, Spain (Hernando de Soto) v. Mississippian culture

Tiguex War, winter 1540-1541, Spain v. Puebloan

Mixtón War, 1540-1542, New Spain, Tlaxcaltec v. Caxcanes

Chichimeca War, 1550-1590, New Spain, Tlaxcaltec, Caxcanes v. Chichimeca Confederation

Navajo Wars, 1600-1716, Crown of Castile v. Navajo

Anglo-Powhatan Wars, 1610-1646, English colonists v. Powhatan Confederacy

Pequot War, 1636-1638, Massachusetts Bay Colony, Plymouth Colony, Saybrook Colony, Connecticut Colony, Mohegan, Narragansett v. Pequot

Beaver Wars, 1642-1698, Iroquois, England, Dutch Republic v. Huron, Erie, Neutral, Odawa, Ojibwe, Mississaugas, Potawatomi, Algonquin, Shawnee, Wenro, Mahican, Innu, Abenaki, Miami, Illinois Confederation, France

Kieft's War, 1643-1645, New Netherland v. Lenape

Peach Tree War, 1655, New Netherland v. Susquehannock and allied tribes

Esopus Wars, 1659-1663, Dutch settlers, Iroquois Confederacy v. Esopus tribe of Lenape

King Philip's War, 1675-1678, New England Confederation, Mohegan, Pequot v. Wampanoag, Nipmuck, Podunk, Narragansett, Nashaway

King William's War, 1688-1697, France, New France, Wabanaki Confederacy v. England, Massachusetts Bay Colony, English America, Iroquois Confederacy

Queen Anne's War, 1702-1713, France, New France, Spain, New Spain, Wabanaki Confederacy, Caughnawaga Mohawk, Choctaw, Timucua, Apalachee, Natchez v. England (until 1707), English America, Great Britain (from 1707), Muscoge (Creek), Yamasee

Tuscarora War, 1711-1715

Fox Wars, 1712-1733, France v. Fox, Meskwaki (Red Earth People), Renards, Outagamis

Yamasee War, 1715-1717, Colonial militia of South Carolina, Colonial militia of North Carolina, Colonial militia of Virginia, Catawba (from 1715), Cherokee (from 1716) v. Yamasee, Ochese Creeks, Catawba (until 1715), Cherokee (until 1716), Waxhaw, Santee

Navajo Wars, 1716-1821, Spain v. Navajo

Chickasaw Wars, 1721-1763, Great Britain, Chickasaw v. France, Choctaw, Illini

Dummer's War, 1722-1725, New England Colonies, Mohawk v. Wabanaki Confederacy, Abenaki, Pequawket, Mi'kmaq, Maliseet

King George's War, 1744-1748, France, New France, Wabanaki Confederacy v. Great Britain, British America, Iroquois Confederacy

Father Le Loutre's War, 1749-1755, France, New France, Wabanaki Confederacy v. Great Britain, British America

Seven Years' War, 1754-1763, Great Britain, British America, Prussia, Portugal (from 1762), Hanover, Brunswick-Wolfenbüttel, Iroquois Confederacy, Hesse-Kassel, Schaumburg-Lippe v. France, French Canada, Holy Roman Empire, Austria, Saxony, Bavaria, Russia (until 1762), Spain (until 1762), Sweden (1757-1762), Abenaki Confederacy, Mughal Empire (from 1757)

French and Indian War, 1754-1763, Great Britain, British America, Iroquois Confederacy, Cataba, Cherokee (until 1758) v. France, New France, Wabanaki Confederacy, Abenaki, Mi'kmaw militia. Algonquin, Lenape, Ojibwa, Ottawa, Shawnee, Wyandots

Anglo-Cherokee War, 1758-1761, Great Britain v. Cherokee

Pontiac's War, 1763-1766, Great Britain v. Ottawa, Ojibwe, Potawatomi, Huron, Miami,

Wea, Kickapoo, Mascouten, Piankeshaw, Delaware, Shawnee, Wyandot, Mingo, Seneca

Lord Dunmore's War, 1774, Colony of Virginia v. Shawnee, Mingo

American Revolutionary War, 1775-1783, United States, France, Spain, Vermont, Netherlands, Oneida, Tuscarora, Watauga Association, Catawba, Lenape, Choctaw v. Great Britain, Loyalists, German Auxiliaries, Iroquois, Onondaga, Mohawk, Cayuga, Seneca, Cherokee

Cherokee-American Wars, 1776-1794, United States v. Cherokee

Second Cherokee War, 1776, United States v. Cherokee

Northwest Indian War, 1785-1795, United States, Chickasaw, Choctaw v. Western Confederacy, Great Britain, British North America

Oconee War, 1785

This list will continue until 1923.

Genocide against Native Americans

The Genocide against Native Americans

the following is from [the Ministry of Foreign Affairs of the People's Republic of China](#)

The reprinting of this official Chinese government document does not reflect any endorsement of this book by the Chinese government.

The American Genocide of the Indians—Historical Facts and Real Evidence

The term “genocide”□, made from the ancient Greek word *genos* (race, nation or tribe) and the Latin *caedere* (killing, annihilation□), was first coined by Raphael Lemkin, a Polish-Jewish legal scholar, in his 1944 book *Axis Rule in Occupied Europe*. It originally means “the destruction of a nation or an ethnic group□”.

In 1946, [the] United Nations (UN) General Assembly affirmed genocide as a crime under international law in Resolution 96, which stated that “Genocide is a denial of the right of existence of entire human groups, as homicide is the denial of the right to live of individual human beings; such denial of the right of existence shocks the conscience of mankind ... and is contrary to moral law and the spirit and aims of the United Nations.”

On December 9, 1948, the UN General Assembly adopted Resolution 260A, of the *Convention on the Prevention and Punishment of the Crime of Genocide*, which entered into

force on January 12, 1951. The Resolution noted that “at all periods of history genocide has inflicted great losses on humanity”. Article II of the Convention clearly defines genocide as any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such: (a) Killing members of the group; (b) Causing serious bodily or mental harm to members of the group; (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; (d) Imposing measures intended to prevent births within the group; (e) Forcibly transferring children of the groups to another group. The United States ratified the Convention in 1988.

Genocide is also clearly defined in U.S. domestic law. The United States Code, in Section 1091 of Title 18, defines genocide as violent attacks with the specific intent to destroy, in whole or in part, a national, ethnic, racial, or religious group, a definition similar to the *Convention on the Prevention and Punishment of the Crime of Genocide*.

According to historical records and media reports, since its founding, the United States has systematically deprived Indians of their rights to life and basic political, economic, and cultural rights through killings, displacements, and forced assimilation, in an attempt to physically and culturally eradicate this group. Even today, Indians still face a serious existential crisis.

According to international law and its domestic law, what the United States did to the Indians covers all the acts that define genocide and indisputably constitutes genocide. The American magazine *Foreign Policy* commented that the crimes against Native Americans are fully consistent with the definition of genocide under current international law.

The profound sin of genocide is a historical stain that the United States can never clear, and the painful tragedy of Indians is a historical lesson that should never be forgotten.

I. Evidence on U.S. government’s genocide against Indians

1. Government-led action

On July 4, 1776, the United States of America was founded with the *Declaration of Independence*, which openly stated that “He (the British King) has excited domestic insurrections amongst us, and has endeavoured to bring on the inhabitants of our frontiers, the merciless Indian Savages”, and slandered Native Americans as “the merciless Indian Savages”.

The U.S. government and leaders treated Native Americans with a belief in white superiority and supremacy, set out to annihilate the Indians and attempted to eradicate the race through “cultural genocide”.

During the American War of Independence (1775-1783), the Second War of Independence (1812-1815) and the Civil War (1861-1865), the U.S. leaders, eager to transform its plantation economy as an adjunct to European colonialism and to expand their territories, coveted the vast Indian lands and launched thousands of attacks on Indian tribes, slaughtering Indian chiefs, soldiers and even civilians, and taking Indian lands for themselves.

In 1862, the United States enacted the *Homestead Act*, which provided that every American citizen above the age of 21, with a mere registration fee of 10 U.S. dollars, could acquire no more than 160 acres (about 64.75 hectares) of land in the west. Lured by the land, the white people swarmed into the Indian areas and started a massacre that resulted in the death of thousands of Indians.

Leaders of the U.S. government at that time openly claimed that the skin of Indians could be peeled off to make tall boots, that Indians must be annihilated or driven to places that no one would go, that Indians had to be wiped out swiftly, and that only dead Indians are good Indians. American soldiers saw the slaughter of Indians as natural, even an honor, and would not rest until they were all killed. Similar hate rhetoric and atrocities abound, and are well documented in many Native American extermination monographs.

2. Bloody massacres and atrocities

Since the colonists set foot in North America, they had systematically and extensively hunted American bison, cutting off the source of food and basic livelihood of the Indians, and causing their death from starvation in large numbers.

Statistics reveal that since its independence in 1776, the U.S. government has launched over 1,500 attacks on Indian tribes, slaughtering the Indians, taking their lands, and committing countless crimes. In 1814, the U.S. government decreed that it would award 50 to 100 dollars for each Indian skull surrendered. The American Historian Frederick Turner acknowledged in *The Significance of the Frontier in American History*, released in 1893, that each frontier was won by a series of wars against the Indians.

The California Gold Rush also brought about the California Massacre. Peter Burnett, the first governor of California, proposed a war of extermination against Native Americans, triggering rising calls for the extermination of Indians in the state. In California in the 1850s and 60s, an Indian skull or scalp was worth 5 dollars, while the average daily wage was 25 cents. From 1846 to 1873, the Indian population in California dropped to 30,000 from 150,000. Countless Indians died as a result of the atrocities. Some of the major massacres include:

- ◆ In 1811, American troops defeated the famous Indian chief Tecumseh and his army in the Battle of Tippecanoe, burned the Indian capital Prophetstown and committed brutal massacres.

- ◆ From November 1813 to January 1814, the U.S. Army launched the Creek War against the Native Americans, also known as the Battle of Horseshoe Bend. On March 27, 1814, about 3,000 soldiers attacked the Creek Indians at Horseshoe Bend, Mississippi Territory. Over 800 Creek warriors were slaughtered in the fight, and as a result, the military strength of the Creeks was significantly weakened. Under the Treaty of Fort Jackson signed on August 9 of the same year, the Creeks ceded more than 23 million acres of land to the U.S. federal government.

- ◆ On November 29, 1864, pastor John Chivington massacred Indians at Sand Creek in southeastern Colorado, due to the opposition of a few Indians to the signing of a land grant

agreement. It was one of the most notorious massacres of Native Americans. Maria Montoya, a professor of history at New York University, said in an interview that Chivington's soldiers scalped women and children, beheaded them, and paraded them through the streets upon their return to Denver.

James Anaya, former UN special rapporteur on the rights of indigenous peoples, submitted his report after a country visit to the United States in 2012. According to the accounts of the descendants of the victims of the Sand Creek Massacre, in 1864, around 700 armed U.S. soldiers raided and shot at Cheyenne and Arapaho people living on the Sand Creek Indian Reservation in Colorado. Media reports showed that the massacre resulted in the deaths of between 70 and 163 among the 200-plus tribal members. Two-thirds of the dead were women or children, and no one was held responsible for the massacre. The U.S. government had reached a compensation agreement with tribal descendants, which has not been delivered even to this day.

◆ On December 29, 1890, near the Wounded Knee Creek in South Dakota, U.S. troops fired at the Indians, killing and injuring more than 350 people according to the U.S. Congressional Record. After the Wounded Knee Massacre, armed Indian resistance was largely suppressed. About 20 U.S. soldiers were awarded the Medal of Honor.

◆ In 1930, the U.S. Bureau of Indian Affairs began sterilizing Indian women through the Indian Health Service program. Sterilization was conducted in the name of protecting the health of Indian women, and in some cases, even performed without the women's knowledge. Statistics suggest that in early 1970s, more than 42% of Indian women of childbearing age were sterilized. This resulted in the near extinction for many small tribes. By 1976, approximately 70,000 Indian women had been forcibly sterilized.

3. Westward expansion and forced migration

In its early days, the United States regarded Indian tribes as sovereign entities and dealt with them on land, trade, justice and other issues largely through negotiated treaties, and occasionally through war. By 1840, the United States had concluded more than 200 treaties with various tribes, most of which were unequal treaties that were reached under U.S. military and political pressure and through deception and coercion, and were binding on the Indian tribes only. The treaties were used as a primary tool to take advantage of Indian tribes.

In 1830, the United States passed the *Indian Removal Act*, which marked the institutionalization of forced relocation of Indians in the country. The Act legally deprived Indian tribes of the right to live in the eastern United States, forcing some 100,000 Indians to move to the west of the Mississippi River from their ancestral lands in the south. The migration began in the summer heat and continued through the winter with subzero temperatures. Trudging 16 miles each day, thousands died along the way as a result of hunger, cold, exhaustion, or disease and plague. The Indian population was decimated, and the forced migration became a "Trail of Blood and Tears". Tribes that refused to move were left to military suppression, forcible eviction, and even massacre by the U.S. government.

In 1839, before Texas joined the United States, the government demanded that Indians remove immediately or face the entire destruction of their possessions and the extermination of their tribe. Large numbers of Cherokees who refused to comply were shot and killed.

In 1863, the U.S. military carried out a “scorched earth” policy to forcibly remove the Navajo tribe, burning houses and crops, slaughtering livestock and vandalizing properties. Under the Army’s watch, Navajos had to walk several hundred kilometers to a reservation in eastern New Mexico. Pregnant women and seniors who fell behind were shot on the spot.

In the mid-19th century, nearly all American Indians were driven to the west of the Mississippi River, and forced by the U.S. government to live in Native American reservations.

As was written in the *Cambridge Economic History of the United States*, as a result of the U.S. government’s forcible expulsion of the last Indians in the east, only a very small number of Indians who were individual citizens of the nation, or those individual Indians who went into hiding during the forceful expulsion, remained in the region.

Sadly, to whitewash this part of history, U.S. historians often glorify the Westward Expansion as the American people’s pursuit of economic development in the western frontier, claiming that it accelerated the improvement of American democracy, boosted economic prosperity, and contributed to the formation and development of the American national spirit. They make no mention of the brutal massacre of Native Americans.

In fact, it was after the Westward Expansion that the budding civilization of the Americas was destroyed, and the Indians, as one of the several major human races, faced complete extinction.

4. Forced assimilation and cultural extinction

To defend the unjust deeds of the U.S. government, some American scholars in the 19th century trumpeted the dichotomy of “civilization versus barbarism” and portrayed Native Americans as a savage, evil, and inferior group. Francis Parkman, a famous 19th-century American historian, even claimed that the American Indian “will not learn the arts of civilization, and he and his forest must perish together.”

George Bancroft, Parkman’s contemporary and another well-known American historian, also claimed that compared with the white people, Native Americans were “inferior in reason and moral qualities”, adding that “nor is this inferiority simply attached to the individual; it is connected with organization, and is the characteristic of the race.” Such an attempt to justify colonial plundering by demeaning Indians is nothing but racially discriminative.

In the 1870s and ’80s, the U.S. government adopted a more aggressive policy of “forced assimilation” to obliterate the social fabric and culture of Indian tribes. The core objective of the strategy was to destroy the original group affiliation as well as the ethnic and tribal identity of the Indians, and transform them into individual Americans with American citizenship, civic consciousness and identification with mainstream American values. Four measures were taken to

this end.

First, fully depriving Indian tribes of their right to self-governance. American Indians had lived in tribal units over the years, and tribes had been their source of strength and spiritual support. The U.S. government forcibly abolished the tribal system and cast individual Indians into a white society with completely different traditions. Unable to find a job or make a living, the Indians became economically destitute, politically deprived and socially discriminated against. They experienced great mental pain and a deep existential and cultural crisis. In the 19th century, the thriving Cherokee tribes enjoyed a material life almost comparable to that of frontier whites. Nevertheless, with their right to self-governance and their tribal system gradually abolished by the U.S. government, the Cherokee community quickly declined and became the poorest group among the indigenous people.

Second, trying to destroy Indian reservations through land distribution and ultimately disintegrate their tribes. The *Dawes Act* passed in 1887 authorized the U.S. president to dissolve Indian reservations, abolish the tribal land ownership in the original reservations, and allocate land directly to Indians living inside and outside the reservations, forming a de facto land privatization system. The abolition of tribal land ownership disintegrated the American Indian communities, and seriously undermined tribal authority. As the highest form of tribal unity, the traditional ritual “Sun Dance” was regarded as “heresy” and thus banned. Most of the land in the original reservations was transferred to the white people through auction; the Indians who were less prepared for farming lost their newly acquired land as a result of swindling among other reasons, and their lives deteriorated by the day.

Third, taking steps to fully impose American citizenship on the Indians. Native Americans who were identified as mixed-race had to give up their tribal status, and others were “de-tribalized”, which greatly damaged the Indian identity.

Fourth, eradicating the Indians’ sense of community and tribal identity by adopting measures on education, language, culture and religion and a series of social policies. Beginning with the *Civilization Fund Act* of 1819, the United States established or funded boarding schools across the country and forced Indian children to attend. According to a report by the National Native American Boarding School Healing Coalition, there have been altogether 367 boarding schools throughout the United States. By 1925, 60,889 Indian children had been forced to attend boarding schools. In 1926, 83% of Indian children were enrolled. The total number of students enrolled still remains unclear to this day. Guided by the idea of “Kill the Indian, Save the Man”, the United States banned Indian children from speaking their native language, wearing their traditional clothes, or carrying out traditional activities, thus erasing their language, culture and identity in an act of cultural genocide. Indian children suffered immensely at school, and some died from starvation, disease and abuse. This was followed by a policy of “forced foster care” — children were forcibly placed in the care of whites, which was a continuation of the assimilation policy and denial of cultural identity. These practices were not banned until 1978, when the *Indian Child Welfare Act* was passed. In passing the Act, it was acknowledged in the Congress that a large number of Indian children had been removed to non-Indian families and institutions

without permission, resulting in the breakup of Indian families.

As renowned historians said, with the forced assimilation, one of the most despicable things in American history reached its peak. This was perhaps the most unfortunate chapter for Indians.

II. American Indians remain in serious survival and development crisis

The U.S. government's genocide of Indians has led to a precipitous drop in the population of Indian communities, deterioration of their living conditions, lack of social security, low economic status, threats to their safety, and plummeted political influence.

1. Sharp decline of population

Before the arrival of white settlers in 1492, there were 5 million Indians, yet by 1800 the number plummeted to 600,000. According to the U.S. Census Bureau, the number of Native Americans in 1900 was only 237,000, the lowest in history. Among them, more than a dozen tribes, such as the Pequot, Mohegan, and Massachusetts, were completely extinct.

Between 1800 and 1900, the American Indians lost more than half of their population, and their proportion in the total U.S. population dropped from 10.15% to 0.31%. Throughout the 19th century, while the U.S. population grew by 20-30% every 10 years, the Indian population experienced a precipitous decline. Currently, the Indian and Alaska Native population accounts for only 1.3% of the total U.S. population.

2. Deteriorating living conditions

Indians were pushed from the east to the barren west, and most of the Indian reservations were located in remote areas unfit for agriculture, much less for investment in industrial development. Most of the tribes, with scattered reservations of varying sizes, were unable to obtain adequate land for development and were therefore subject to severe development restraints.

There are currently about 310 Native American reservations in the United States, accounting for about 2.3% of the U.S. territory, and not all federally recognized tribes have their own reservations. These reservations are mostly located in remote and barren areas with poor living conditions and inadequate access to water and other vital resources, where 60% of the road system are dirt or gravel roads. On the surface, Indians are no longer the subject of "extermination", but just "forgotten", "invisible" and "discriminated against"; yet in reality, they are simply left there for self-extinction.

The U.S. government has also systematically used Indian reservations as toxic or nuclear waste dumps through the means of deception and coercion, subjecting them to long-term exposure to uranium and other radioactive materials. As a result, the cancer incidence and fatality rates in the communities concerned is significantly higher than in other parts of the country. Indian communities have effectively become the "garbage cans" in the development process of the United States.

For instance, in the Navajo Nation reservation, the largest Indian tribe in the United States, about a quarter of women and some infants have large amounts of radioactive substances in their bodies. During the 40-plus years prior to 2009, the U.S. government had reportedly conducted a total of 928 nuclear tests in the area inhabited by the Shoshone tribe of American Indians, producing approximately 620,000 tons of radioactive fallout, nearly 48 times the amount of radioactive fallout from the 1945 atomic bombing in Hiroshima, Japan.

3. Lack of social security

According to a report released by the Indian Health Service, life expectancy of American Indians is 5.5 years lower than that of average Americans, and the incidence of diabetes, chronic liver disease and alcohol addiction are 3.2 times, 4.6 times and 6.6 times as much as the U.S. average respectively. Academic studies show that among all ethnic groups in the United States, Indians have the shortest life expectancy and the highest infant mortality rate; the incidence of drug and alcohol abuse among Indian adolescents is 13.3 times and 1.4 times higher than the national average, and the suicide rate 1.9 times that of the national average. These phenomena are closely related to insufficient government investment of public health resources, underlying health inequities, and the overall underdevelopment of minority communities.

The U.S. government provides limited educational and medical assistance to Indians. 99% of such assistance has gone to reservation residents, but 70% of the Indians live in cities and therefore cannot be covered. Apart from the Indian Health Service, many Indians have no access to health insurance and are often subject to discrimination and language barriers in non-Indian health services and non-tribal health facilities.

The underprivileged status of Indians in health care was further exposed amid the COVID-19 pandemic. U.S. CDC statistics show that as of August 18, 2020, the COVID-19 incidence and case-fatality rates among Indians were 2.8 times and 1.4 times, respectively, that of white Americans. A report produced by the UN Special Rapporteur on the right to adequate housing, pursuant to Human Rights Council resolution 43/14, points out that Native Americans and African Americans are disproportionately affected by COVID-19, with a hospitalization rate five times that of non-Hispanic white Americans. The COVID-19 infection rate in Navajo Nation, the largest Indian reservation in the United States, even surpassed that of New York at one point, reaching the highest in the country.

In terms of education, the conditions of Indian reservations are much poorer than those of white American communities. According to the 2013-2017 statistics of the U.S. Census Bureau, only 14.3% of American Indians held a bachelor's degree or higher, in contrast to 15.2% for Hispanics, 20.6% for African Americans and 34.5% for white Americans. Many Indian reservations are struggling with dilapidated schools and shattered education systems.

The New York Times reported that only 60% of American Indian students in the Wind River Reservation finished high school, while 80% of white students in Wyoming graduated from high school; the dropout rate in the reservation the reservation is 40%, more than twice the state

average in Wyoming; and American Indian teens are twice more likely to commit suicide compared with their peers in the country.

5. Disadvantaged political status

In mainstream American politics, the Indians and other Native Americans are not choosing to be “silent”. Rather, they have been “silenced” by the system and “systematically erased”. American Indians have a relatively small population and do not have a strong interest in politics. With a lower turnout rate in elections than that of other ethnic groups, their interests and demands are often ignored by politicians. As a result, American Indians have been reduced to second-class citizens in the United States, and they are often called the “invisible minority” or the “vanishing race” in the country. It was not until 1924 that the American Indians were conditionally granted U.S. citizenship and not until 1965 that they were given the right to vote.

In June 2020, the Native American Rights Fund and other institutions conducted a study on the barriers to political participation faced by Native American voters, with the participation of civil societies, legal experts, and scholars from around the country. The results showed that only 66% of the 4.7 million eligible Native American voters were registered, and more than 1.5 million eligible Native American voters could not meaningfully exercise their right to vote due to political barriers. According to the results, Native American voters face 11 pervasive obstacles to political participation, including limited hours of government offices, lack of funding for elections, and discrimination. In the current U.S. Congress, only four members are American Indians, accounting for about 0.74% of the members of Congress in both houses. The political engagement and influence of the Native Americans are disproportionately lower than other groups of the American population.

Native American communities have long suffered neglect and discrimination. Many U.S. government statistical programs either leave them aside completely or simply classify them as “others”. Shannon Keller O’Loughlin, Chief Executive and Attorney of the Association on American Indian Affairs, said that the greatest aspiration of Native Americans is to attain social recognition. Native Americans have diverse cultures and languages, but are often seen not as an ethnic group, but as a political stratum with limited autonomy based on treaties with the federal government. The Brookings Institution recently published an article saying that the U.S. monthly employment report ignores American Indians. The economic well-being of this group receives little attention and is largely left out of the discussion. There are nearly 200 American Indian tribes in California, only half of which are recognized by the federal government. Although the Biden administration appointed the first American Indian cabinet minister, the political participation rate and political influence of Indians are still way too low compared to their share of the American population.

According to a poll conducted by the Harvard T.H Chan School of Public Health, more than one third of Native Americans have experienced neglect, violence, humiliation and discrimination in the workplace, and American Indians living in Indian populated areas are more likely to be subject to discrimination when dealing with the police, at work and during voting.

According to the U.S. Department of the Interior, American Indians are twice as likely to be jailed for minor crimes as other ethnic groups. The incarceration rate of Indian men is four times that of white men, and the rate of Indian women is six times that of white women.

The Atlantic commented that from the expulsion, slaughter and forced assimilation back in history to the current widespread poverty and neglect, the American Indians, once the owner of this continent, now have a very weak voice in American society. American Indian writer Rebecca Nagel pointed out sharply that being made invisible is a new type of racial discrimination against American Indians and other indigenous peoples. The *Los Angeles Times* commented that the unjust treatment of Native Americans is deeply embedded in the social structure and legal system of the United States.

6. Endangered culture

From the 1870s to the late 1920s, the U.S. government forcibly implemented the system of American Indian boarding schools in Native American areas to impose English and Christian education on Indian children. There were even cases of Indian children being kidnapped and forced to attend schools in many places. The system of American Indian boarding schools imposed on Native Americans, as part of the history of the United States, caused irreparable damage, especially to the youths and children. Many Native Americans of the younger generation found themselves unable to gain a foothold in mainstream society and felt difficult to preserve and promote their own traditional culture, which leaves them bewildered and anguished about their own culture and identity.

In these boarding schools, American Indian children's braids, a symbol of courage, were cut off, and their traditional clothing burned. They were strictly prohibited from speaking their mother tongue and violators would be beaten hard. In these schools, military-style management was imposed on Native American children who suffered from not only corporal punishment by mentors, but also sexual abuse. Quite a few American Indian children fell ill and even died due to harsh education methods, forced way of living, homesickness and malnutrition.

The U.S. government had also enacted laws prohibiting Native Americans from performing religious rituals which have been passed down through the generations, and those involved in such activities would be arrested and imprisoned. Since the 20th century, with the rise of the Civil Rights Movement in the United States, the protection of Native Americans' traditional culture and history has improved to some extent. However, due to the serious damage that has already been inflicted, what is left now are mostly cultural relics preserved by later generations using the English language instead.

Rebecca Nagle believes that information about Native Americans has been systematically removed from mainstream media and popular culture. According to a report by National Indian Education Association, 87% of state-level U.S. history textbooks do not mention the post-1900 history of indigenous people. According to the Smithsonian Institution, things taught about Native Americans in American schools are full of inaccurate information and fail to present the real picture of the sufferings of indigenous people. Rick Santorum, a former Republican senator

from Pennsylvania, said publicly at the Young America's Foundation that "We birthed a nation from nothing. I mean, there was nothing here ... but candidly, there isn't much Native American culture in American culture." His remarks dismissed and negated the influence of indigenous people in American culture.

III. Domestic criticism long ignored by the U.S. government over the "genocide" of American Indians

First, the academic community has a shared view on this issue. Since the 1970s, American academics have begun to use the term "genocide" to denounce U.S. policies toward American Indians. In the 1990s, *American Holocaust: The Conquest of the New World* by David E. Stannard, a professor at the University of Hawaii, and *A Little Matter of Genocide* by Ward L. Churchill, a former professor at the University of Colorado, sent shock waves across the academic community. *Blood and Soil: A World History of Genocide and Extermination from Sparta to Darfur* by Ben Kiernan, a professor at Yale University, gave a brief account of genocides the United States committed against American Indians at different historical stages. And *An American Genocide: The United States and the California Indian Catastrophe, 1846-1873* by Benjamin Madley, an associate professor at UCLA, unearthed the massacres of Native Americans by the U.S. government during the California Gold Rush.

Roxanne Dunbar-Ortiz, an American historian dedicated to the study of indigenous peoples, concluded that all five acts of genocide listed in the *Convention on the Prevention and Punishment of the Crime of Genocide* can be found in the crimes the United States committed against American Indians. Native Americans are undoubtedly victims of genocide, and it is of important significance to admit that U.S. policies toward American Indians are, in fact, acts of genocide.

Second, the media has been calling for change on this issue. An article published in *The New York Times* reported that the UC Hastings College of the Law was named after a perpetrator of genocide, which accelerated the process of changing the name of the college. According to ABC News, the aspirations from Native Americans range from sovereignty claims to making their voice heard. Some respondents said that the theft of American Indians' land and the obliteration of indigenous languages were in fact systemic genocides. *The Washington Post* published an article accusing the United States of never formally admitting that it has taken genocidal policies toward indigenous people. A *Foreign Policy* article demanded that the United States acknowledge its genocide of American Indians. *Bounty*, a documentary released in November 2021, in which some Native Americans were invited to read official historical documents on the United States posting high reward for American Indians' scalps, also triggered reflections on the heinous genocidal policies in the country.

As the affirmative action became prevalent after World War II, American society began to reflect on the issue of American Indians. The government passed a resolution apologizing to indigenous people. In 2019, Gavin Newsom, governor of California, issued a statement to apologize to the indigenous population in California, admitting that the state's actions against

Indian tribes in the mid-19th century were genocides.

However, the reflection of the U.S. government looks more like a “political stunt.” It has not officially admitted that the atrocities against Native Americans are acts of genocide. Real changes still seem a long way off.

To sum up, successive U.S. administrations have not only wiped out a large number of American Indians, but also, through systematic policy design and bullying acts of cultural suppression, thrown them into an irreversible, difficult situation. The indigenous culture was fundamentally crushed, and the inter-generational inheritance of indigenous lives and spirits was under severe threats. The slaughter, forced relocation, cultural assimilation and unjust treatment the United States committed against American Indians have constituted de facto genocides. These acts fully match the definition of genocide in the UN *Convention on the Prevention and Punishment of the Crime of Genocide*, and have continued for hundreds of years to this day. It is imperative that the U.S. government drop its hypocrisy and double standards on human rights issues, and take seriously the severe racial problems and atrocities in its own country.

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Contact us Address: No. 2, Chaoyangmen Nandajie, Chaoyang District, Beijing, 100701 Tel: 86-10-65961114

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International Genocide Treaty

Convention on the Prevention and Punishment of the Crime of Genocide

**Approved and proposed for signature and ratification or accession by
General Assembly resolution 260 A (III) of 9 December 1948 Entry into force:
12 January 1951, in accordance with article XIII**

The Contracting Parties ,

Having considered the declaration made by the General Assembly of the United Nations in its resolution 96 (I) dated 11 December 1946 that genocide is a crime under international law, contrary to the spirit and aims of the United Nations and condemned by the civilized world,

Recognizing that at all periods of history genocide has inflicted great losses on humanity, and

Being convinced that, in order to liberate mankind from such an odious scourge, international co-operation is required,

Hereby agree as hereinafter provided :

Article I

The Contracting Parties confirm that genocide, whether committed in time of peace or in time

of war, is a crime under international law which they undertake to prevent and to punish.

Article II

In the present Convention, genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:

- (a) Killing members of the group;
- (b) Causing serious bodily or mental harm to members of the group;
- (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
- (d) Imposing measures intended to prevent births within the group;
- (e) Forcibly transferring children of the group to another group.

Article III

The following acts shall be punishable:

- (a) Genocide;
- (b) Conspiracy to commit genocide;
- (c) Direct and public incitement to commit genocide;
- (d) Attempt to commit genocide;
- (e) Complicity in genocide.

Article IV

Persons committing genocide or any of the other acts enumerated in article III shall be punished, whether they are constitutionally responsible rulers, public officials or private individuals.

Article V

The Contracting Parties undertake to enact, in accordance with their respective Constitutions, the necessary legislation to give effect to the provisions of the present Convention, and, in particular, to provide effective penalties for persons guilty of genocide or any of the other acts enumerated in article III.

Article VI

Persons charged with genocide or any of the other acts enumerated in article III shall be tried by a competent tribunal of the State in the territory of which the act was committed, or by such international penal tribunal as may have jurisdiction with respect to those Contracting Parties which shall have accepted its jurisdiction.

Article VII

Genocide and the other acts enumerated in article III shall not be considered as political crimes for the purpose of extradition.

The Contracting Parties pledge themselves in such cases to grant extradition in accordance with their laws and treaties in force.

Article VIII

Any Contracting Party may call upon the competent organs of the United Nations to take such action under the Charter of the United Nations as they consider appropriate for the prevention and suppression of acts of genocide or any of the other acts enumerated in article III.

Article IX

Disputes between the Contracting Parties relating to the interpretation, application or fulfilment of the present Convention, including those relating to the responsibility of a State for genocide or for any of the other acts enumerated in article III, shall be submitted to the International Court of Justice at the request of any of the parties to the dispute.

Article X

The present Convention, of which the Chinese, English, French, Russian and Spanish texts are equally authentic, shall bear the date of 9 December 1948.

Article XI

The present Convention shall be open until 31 December 1949 for signature on behalf of any Member of the United Nations and of any non-member State to which an invitation to sign has been addressed by the General Assembly.

The present Convention shall be ratified, and the instruments of ratification shall be deposited with the Secretary-General of the United Nations.

After 1 January 1950, the present Convention may be acceded to on behalf of any Member of the United Nations and of any non-member State which has received an invitation as aforesaid.

Instruments of accession shall be deposited with the Secretary-General of the United Nations.

Article XII

Any Contracting Party may at any time, by notification addressed to the Secretary-General of the United Nations, extend the application of the present Convention to all or any of the territories for the conduct of whose foreign relations that Contracting Party is responsible.

Article XIII

On the day when the first twenty instruments of ratification or accession have been deposited, the Secretary-General shall draw up a procès-verbal and transmit a copy thereof to each Member of the United Nations and to each of the non-member States contemplated in article XI.

The present Convention shall come into force on the ninetieth day following the date of deposit of the twentieth instrument of ratification or accession.

Any ratification or accession effected subsequent to the latter date shall become effective on the ninetieth day following the deposit of the instrument of ratification or accession.

Article XIV

The present Convention shall remain in effect for a period of ten years as from the date of its coming into force.

It shall thereafter remain in force for successive periods of five years for such Contracting Parties as have not denounced it at least six months before the expiration of the current period.

Denunciation shall be effected by a written notification addressed to the Secretary-General of the United Nations.

Article XV

If, as a result of denunciations, the number of Parties to the present Convention should become less than sixteen, the Convention shall cease to be in force as from the date on which the last of these denunciations shall become effective.

Article XVI

A request for the revision of the present Convention may be made at any time by any Contracting Party by means of a notification in writing addressed to the Secretary-General.

The General Assembly shall decide upon the steps, if any, to be taken in respect of such request.

Article XVII

The Secretary-General of the United Nations shall notify all Members of the United Nations and the non-member States contemplated in article XI of the following:

- (a) Signatures, ratifications and accessions received in accordance with article XI;
- (b) Notifications received in accordance with article XII;
- (c) The date upon which the present Convention comes into force in accordance with article XIII;
- (d) Denunciations received in accordance with article XIV;
- (e) The abrogation of the Convention in accordance with article XV;
- (f) Notifications received in accordance with article XVI.

Article XVIII

The original of the present Convention shall be deposited in the archives of the United Nations.

A certified copy of the Convention shall be transmitted to each Member of the United Nations and to each of the non-member States contemplated in article XI.

Article XIX

The present Convention shall be registered by the Secretary-General of the United Nations on the date of its coming into force.

reservation needs

reservation needs

“Native Americans are the most impoverished ethnic group in the United States.

According to a study done by Northwestern University, one-third of Native Americans live in poverty. The population has a median income of \$23,000 per year and 20% of households earn less than \$5,000 a year. Due to the oppression of Indigenous peoples, reservations cannot provide adequate economic opportunity. As a result, a majority of adults are unemployed.” —[5 Facts About Life on the Natie American Reservations](#) by the Borgen Project

employment

➤ From [Reservation Living Conditions](#), by A Program of Patnership with Native Americans:

Typically, Tribal and Federal governments are the largest employers on the reservations. Many households are overcrowded and earn only social security, disability or veteran's income. The scarcity of jobs and lack of economic opportunity mean that, depending on the reservation, four to eight out of ten adults on reservations are unemployed. Among American Indians who are employed, many are earning below poverty wages (2005 BIA American Indian

Population & Labor Force Report).

The overall percentage of American Indians living below the federal poverty line is 28.2% (2008, American Indians Census Facts). The disparity for American Indians living below poverty on the reservations is even greater, reaching 38% to 63% in our service area (2006, National Center for Education Statistics, and other sources).

—[Reservation Living Conditions](#), by A Program of Patnership with Native Americans

housing

“Forty percent of on-reservation housing is considered substandard (compared to 6 percent outside of Indian Country) and nearly one-third of homes on reservations are overcrowded. Less than half of the homes on reservations are connected to public sewer systems, and 16 percent lack indoor plumbing.” —[Housing & Infrastructure](#) by National Congress of American Indians

“There is a housing crisis in Indian country. Despite the Indian Housing Authority’s (IHAs) recent efforts, the need for adequate housing on reservations remains acute. One legislator deplored the fact that “there are 90,000 homeless or underhoused Indian families, and that 30% of Indian housing is overcrowded and less than 50% of it is connected to a public sewer.” (March 8, 2004, Indian Country Today).” —[Reservation Living Conditions](#) by A Program of Patnership with Native Americans

[M]any American Indians are living in substandard housing. About 40% of on-reservation housing is considered inadequate (2003, U.S. Commission on Civil Rights). The waiting list for tribal housing is long; the wait is often three years or more, and overcrowding is inevitable. Most families will not turn away family members or anyone who needs a place to stay. It is not uncommon for 3 or more generations to live in a two-bedroom home with inadequate plumbing, kitchen facilities, cooling, and heating.

—[Reservation Living Conditions](#), by A Program of Patnership with Native Americans

utilities

“In some areas, up to 50 percent of Native homes are without phone service.” —[Housing & Infrastructure](#) by National Congress of American Indians

- From [Reservation Living Conditions](#), by A Program of Patnership with Native Americans:

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Further increasing the concerns with reservation housing is the noticeable absence of utilities. While most Americans take running water, telephones, and electricity for granted, many reservation families live without these amenities. On a seriously stretched budget, utilities are viewed as luxuries compared to food and transportation. Overcrowding, substandard dwellings, and lack of utilities all increase the potential for health risk, especially in rural and remote areas where there is a lack of accessible healthcare.

—[Reservation Living Conditions](#), by A Program of Patnership with Native Americans

health care

“**Native Americans have the highest risk for health complications.** Across the board, Native American health is disproportionately worse than other racial groups in the United States. This population is 177% more likely to die of diabetes and 500% more likely to die from tuberculosis. Native Americans also have a 60% higher infant mortality rate when compared to Caucasians. Most Native American reservations rely on the Indian Health Service, a severely underfunded federal program that can only provide for approximately 60% of the needs of the insured. That does not account for a majority of those on the reservations. Only about 36% of Native Americans have private health care and one-third of the non-elderly remain uninsured.”

—[5 Facts About Life on the Natie American Reservations](#) by the Borgen Project

- From [Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans:

‘

The average life expectancy for Native Americans has improved yet still trails that of other Americans by almost 5 years’ (2010, HHS Indian Health Disparities Fact Sheet). About 55% of American Indians rely on the Indian Health Service for medical care (2006, Indian Health Facts). Yet, the Indian Health Care Improvement Act only meets about 60% of their health needs (2003, U.S. Commission on Civil Rights).

Due to underfunding, Indian Health Service facilities are crisis-driven and leave a wide gap in adequate and preventative health care for many Native Americans on the reservations. Pharmacies and doctor's offices outside of hospitals are completely non-existent in some communities.

—[Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans

education

➤ From [Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans:

Native students hold the highest national dropout rate. Conditions on reservations leave schools severely underfunded and many children are unable to attend. This delay in education leaves early childhood skills undeveloped. According to Native Hope, “Simple skills that many 5-year-olds possess like holding a crayon, looking at a book and counting to 10 have not been developed.” Inadequate education is highly reflective of Native American graduation rates. Native students have a 30% dropout rate before graduating high school, which is twice the rate of the national average. This number is worse in universities — 75% to 93% of Native American students drop out before completing their degrees. Such disparity between Native American students and their colleagues has inspired the increase in scholarships for this community.

—[Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans

Annie (and her sister and brother) were taken away from their mother and adopted out. Annie remembers from her childhood about her mother talking about their native American heritage. She doesn't know any details. She is severaly mentally ill (manic depression) and currently homeless. If you can spare some money to help get her food and shelter, please go to [Help Annie GoFundMe page](#).

Native National Guard



Native National Guard

Native National Guard

Permission unconditionally granted to all Native American and Native Hawai'ian nations to make use of any materials in this section for free (contact me to acquire all source materials)

Cover Image Credits: Image by [Bob Bello](#) from Pixabay

The purpose of this section is give ideas on how money the US military will spend anyway can be diverted to Native American and Native Hawai'ian nations by creating a Native National Guard.

Most military activities also have civilian uses, so the infrastructure needed to support a Native National Guard can also be used by the Native American and Native Hawai'ian nations for civilian purposes.

Preface

Native National Guard

Make sure you have the latest version from:
<https://www.thissideofsanity.com/nerdary/nerdary.pdf>

get the latest PDF

Ideas on a Native National Guard.

1. I do *not* speak for any Native American nation or the Kingdom of Hawai'i.
2. I am making engineering proposals. Any decision on the proposals lies solely in the hands Native American nations and the Kingdom of Hawai'i.
3. Any version of these proposals require making tough choices. There are no easy answers.
4. I do *not* advocate for war. You will see that I keep emphasizing peaceful, humanitarian, and civilian uses for things that the U.S. government will probably obtain anyway.
5. The U.S. Navy has an expensive hole they must fill (armored ships, not built since World War II). There are many possible ways to fill this need.
6. Much of the money could be directed in a manner that simultaneously helps Native American nations and the Kingdom of Hawai'i. This money will be spent,
7. There are numerous valuable, peaceful, and humanitarian uses for an armored ship and even more for the needed support bases. These ships and bases do not have to be purely for war.

8. Massive support infrastructure is required to support these ships. Much of that infrastructure includes things that Native American nations and the Kingdom of Hawai'i need.

9. None of this is proper reparations or in any way makes up for past genocide against Native American nations and the Kingdom of Hawai'i. None of this should interfere with the eventual complete restoration of land stolen from Native American nations and the Kingdom of Hawai'i. The goal is to divert as much of the inevitable military money as possible to useful purposes in a way that helps Native American nations and the Kingdom of Hawai'i.

10. As sovereign nations, Native American nations and the Kingdom of Hawai'i have every right under international law to wield military might.

11. As discussed in this section, there are significant and important ways this program could help solve many pressing civilian problems currently facing Native Americans. The US military budget has tripled since 9-11. The only thing holding back faster military budget growth is extreme unpopularity. The general popularity of Native Americans, at least in an idealized form, could be used to spend even more money. It is absolutely vital that Native American nations stay united and use their popularity leverage to force the US government to create these armored ships and their support infrastructure in a way that has compelling benefits for Native Americans themselves.

TLDR summary:

This brief summary is followed by the table of contents and then an expanded point by point summary. You only need to read one of the two summaries, depending on how detailed an overview you want.

I am presenting possibilities. Attempting to combine everything in this section will create something that does everything poorly. A successful result requires picking priorities and then focusing on accomplishing those priorities.

This summary is repeated immediately after the table of contents with more explanation and then followed by detailed chapters on the various possibilities.

I do not advocate for war. War is brutal and hellish and lots of innocent people die.

I was a conscientious objector in the U.S. Army. If war broke out, my assignment was to escort the officer and NCO families to Switzerland. I don't like war. I don't want war to happen.

I want current wars to stop. The plan here is to divert money the Military Industrial Complex wants to spend to Native American nations in a way that has substantial peaceful use.

The sinking of the *Moskva* has caused major navies, including the U.S. Navy and U.K. Royal Navy, to realize the need for armored ships (their perception, not necessarily reality).

The U.S. Navy can't get Congress to fund all of the ships the Navy wants. The Navy will have to fund some variation of armored ship. Providing a way for it to come out of different budget is likely to make the Navy an enthusiastic supporter.

A new branch of service, the Native National Guard, funded separately, can provide the U.S. military with the needed ships and supporting infrastructure from a new federal funding source.

Congress has shown for decades a willingness to overspend on the military (almost half the military spending of the entire world and more than the next 11 nations combined).

The U.S. government has dramatically underpaid its treaty obligations to Native American nations.

Creating a Native National Guard to operate the proposed armored ships would move the cost out of the Navy budget and increase the likelihood of greater spending.

In addition to Native American nations obtaining substantial military power and providing numerous jobs for Native Americans, much of the infrastructure needed for operating the proposed armored ships has dual civilian uses critically needed by Native American nations, including medical care, safe drinking water, road and bridge construction, etc.

The proposed armored ships will need support from bases and ports.

Because there are numerous ways to create future armored ships, this book will look at a variety of possible ideas that the U.S. government and Native American governments might use to implement the underlying plan.

Note that it would be absurd for a single class of ship to include everything included here. Quality ships must have a clear purpose. At some point decisions need to be made about how the ship is designed.

I recommend concentrating on a ship that has the primary goal of rapid response to humanitarian emergencies but also equipped with sufficient military functionality

to be of interest to the U.S. military.

It is likely that only two (2) to twelve (12) armored ships will be constructed and deployed.

Native Americans serve in the United States Armed Forces at five times the national average. Native Americans have served in every major conflict for more than 200 years, from the Revolutionary War to Normandy on D-Day.

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Permissions: Any Native American or Native Hawai'ian or Native Canadian or other indigenous people may make use of any of these materials.

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goal of this section

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overview

I do *not* speak for any Native American nation or the Kingdom of Hawai‘i.

These are engineering proposals. Any decision on the proposals lies solely in the hands Native American nations and the Kingdom of Hawai‘i. Any version of these or related proposals require making tough choices. There are no easy answers.

I do *not* advocate for war. You will see that I keep emphasizing peaceful, humanitarian, and civilian uses for things that the U.S. government will probably obtain anyway.

McKee Productions summarized this (with slight editing) as “How To Get The Military To Buy Ships That Can Be Commanded and Staffed By Native American Crews For Humanitarian Purposes.” (“but were afraid to ask...”) and as “Progressive Approaches to Gradually Humanizing ‘Defense’ Spending: Multipurpose Ships and Native National Guard.”

The US government hasn’t paid Native American nations the money it promised, but the US government spends money on the military willy-nilly.

The creation of a Native National Guard might get a bunch of money from the federal government into the hands of the 574 federally recognized Native American nations plus the

Kingdom of Hawai'i.

A lot of military things have civilian uses. And there is a lot of infrastructure required to support a military and a lot of that infrastructure can also have civilian uses.

The term “National” has dual meanings, and can legitimately be interpreted as recognizing the Native National Guard as being the national military of Native American nations.

The goal is quite simply to take a clearly identified future need and divert substantial amounts of U.S. federal military spending to solve this existing problem through the creation of a Native National Guard fleet of armored ships.

I do not claim to speak for Native Americans. I do not claim that any Native American should even listen to what I say, much less do what I say. I do claim I can make suggestions that Native Americans are free to accept or reject or even just ignore and never listen to.

I do invite Native Americans to give me feedback and help me modify the ideas presented here to better fit with Native American cultures.

point by point

I do not advocate for war. War is brutal and hellish and lots of innocent people die.

I was a conscientious objector in the U.S. Army. If war broke out, my assignment was to escort the officer and NCO families to Switzerland. I don't like war. I don't want war to happen. I want current wars to stop. The plan here is to divert money the Military Industrial Complex wants to spend to Native American nations in a way that has substantial peaceful use.

Native Americans have a long tradition of being exemplary soldiers, sailors, Marines, and airmen in the U.S. military.

Native Americans serve in the United States Armed Forces at five times the national average. Native Americans have served in every major conflict for more than 200 years, from the Revolutionary War to Normandy on D-Day.

The sinking of the *Moskva* has caused major navies, including the U.S. Navy and U.K. Royal Navy, to realize the need for armored ships (their perception, not necessarily reality).

The U.S. Navy has an expensive hole they must fill (armored ships). Battleships have not been made since World War II.

The last large armored ship built was the British fast battleship HMS *Vanguard*, started 2 October 1941 and finished 12 May 1946. The last battleships the U.S. built were the fast

battleship *Iowa*-class, which were brought back into service in the Korean War, the Vietnam War, and updated for the end of the Cold War and the Gulf War. After WWII, all the large navies decided that the offensive power of the aircraft carrier and ballistic or attack submarine made them the only reasonable capital ships. The U.S. Navy's battleships proved useful in four wars. The Marine Corps has been begging for either replacement battleships or restoration of at least two *Iowas* for two decades now. The *Iowas* are likely to be too old to restore. There are many possible ways to fill this need.

After the sinking of the Russian cruiser *Moskva* (flagship of the Russian Black Sea fleet) by two old-tech, shore launched Neptune missiles, numerous navies, including the U.S. Navy and U.K. Royal Navy have pulled out previous plans for a modern armored ship that can withstand multiple missile attacks.



sinking of the Russian cruiser *Moskva* 13 April 2022

author unknown

During testing after the end of WWII, two battleships (the *New York* and the *Pennsylvania*) survived nuclear explosions with minimal damage.

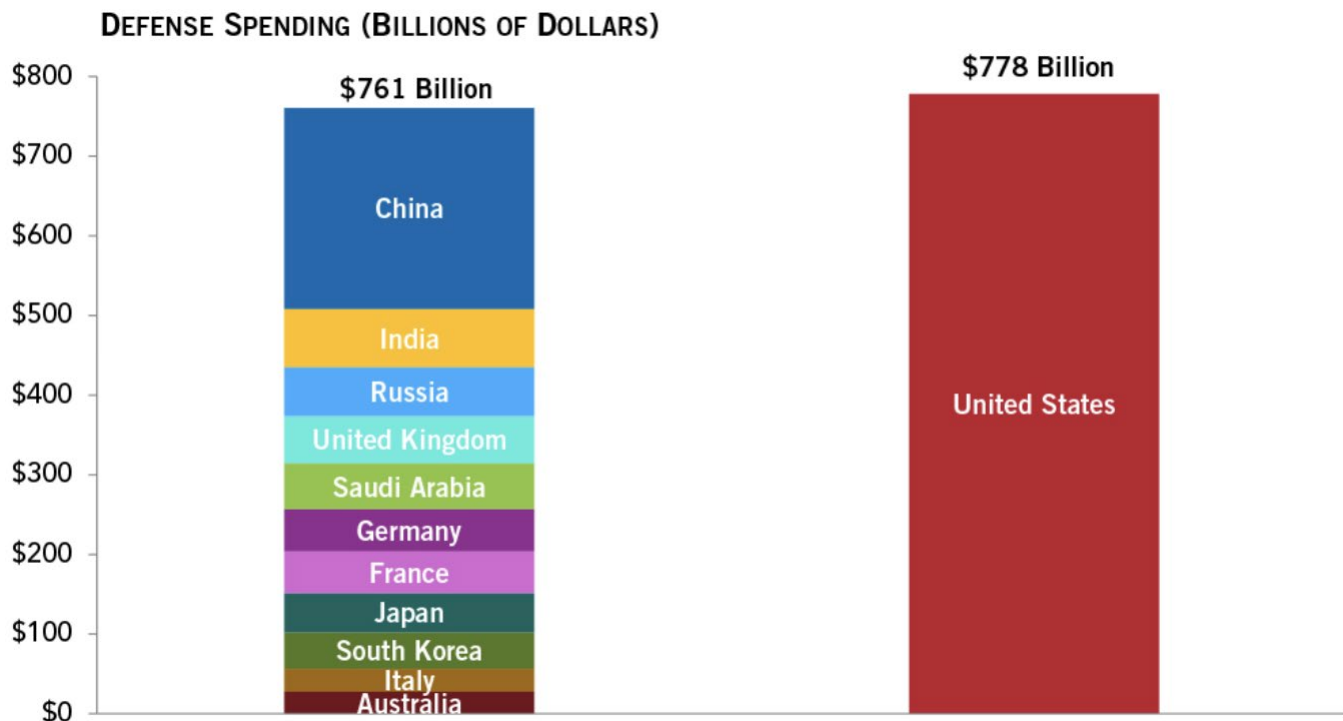
The U.S. Navy can't get Congress to fund all of the ships the Navy wants. The Navy will have to fund some variation of armored ship. Providing a way for it to come out of different budget is likely to make the Navy an enthusiastic supporter.

Navy programs recently cancelled include *Zumwalt*-class destroyers, electromagnetic railgun research, and Snakehead [Large Displacement Unmanned Undersea Vehicle], as well as reductions in the acquisition of additional aircraft, rotocraft, submarines, destroyers, and frigates.

A new branch of service, the Native National Guard, funded separately, can provide the U.S. military with the needed ships and supporting infrastructure from a new federal funding source.

The US military budget has tripled since 9-11. The only thing holding back faster military budget growth is extreme unpopularity. The general popularity of Native Americans, at least in an idealized form, could be used to spend even more money. It is absolutely vital that Native American nations stay united and use their popularity leverage to force the US government to create these armored ships and their support infrastructure in a way that has compelling benefits for Native Americans themselves.

Congress has shown for decades a willingness to overspend on the military (almost half the military spending of the entire world and more than the next 11 nations combined).



defense spending comparison

[Peter G. Peterson Foundation](#)

The information above is from the Stockholm International Peace Research Institute (SIPRI) July 2022 and the SIPRI Military Expenditure Database April 2021. The SIPRI numbers include discretionary and mandatory outlays by the Department of Defense, Department of Energy, Department of State, and the National Intelligence Program.

The U.S. government has dramatically underpaid its treaty obligations to Native American nations.

As just one example, the U.S. government has a legal obligation to pay for Native American health care. The feds spend about half per person on Native American health care as they do for

federal prisoner health care. The feds spend about 1/20th per Native American than what they spend on Medicare.

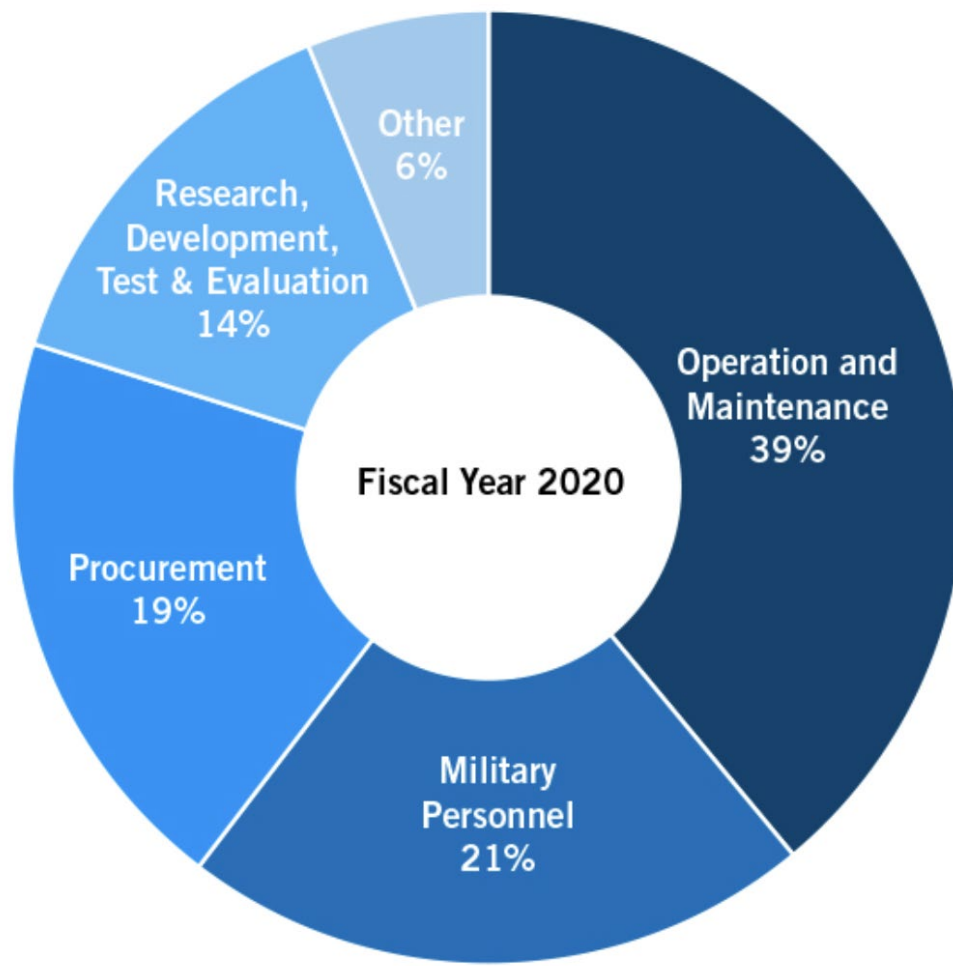
Much of the money needed to build armored ships and provide new support infrastructure could be directed in a manner that simultaneously helps Native American nations and the Kingdom of Hawai‘i.

“I’m home thinking about how it would cost \$32-billion to fully fund Native American health services yet last year Congress only came up with \$6-billion—not enough to cover population growth and inflation. I think about the Natives you intentionally neglect, not Ukrainians.” Brett Chapman, Native American attorney continuing the legacy of his relative Standing Bear who was the first Native American to win civil rights in the United States. **NB:** I am not in any way implying that Mr. Chapman supports anything in this section, simply using his example of the U.S. government underfunding its treaty obligations to Native American nations.

Members of the National Guard are trained by the regular U.S. military, and there are literally hundreds of jobs, including high tech jobs, where the training is applicable to civilian life.

Creating a Native National Guard to operate the proposed armored ships would move the cost out of the Navy budget and increase the likelihood of greater spending.

In addition to Native American nations obtaining substantial military power and providing numerous jobs for Native Americans, much of the infrastructure needed for operating the proposed armored ships has dual civilian uses critically needed by Native American nations, including medical care, safe drinking water, road and bridge construction, etc.



defense spending activities

[Peter G. Peterson Foundation](#)

The information above is from the Office of Management of Budget, *Public Budget Database, Budget of the United States Government: Fiscal Year 2022*, May 2021.

I propose a unified Native National Guard shared jointly by all Native American and Native Hawai‘ian nations together, as well individual Native National Guards for each nation.

I propose both the kind of training typical of the U.S. military and specialized alternative training customized for those who can’t meet normal military standards (such as the elderly and the handicapped) and that all Native Americans and Native Hawai‘ians (regardless of age or current education) be eligible for membership in the Native National Guard. Nobody would be forced to join.

This would provide Native Americans and Native Hawai‘ians with pay for a weekend drill each month and a two week annual training period (usually during the summer).

This would provide Native Americans and Native Hawai‘ians with useful training, including possibly some high tech training, depending on each individual’s military occupational specialty.

The bases, ports, airfields, depots, and other facilities required to support the ships and the infrastructure of the Native National Guard should be built on land adjacent to existing reservations, adding to the sovereign native land, or on new land provided for those Native American nations that don't currently have a reservation. Key facilities, including the primary home ports for the armored ships, as well as maintenance and repair facilities, supply facilities, etc., would be on additional land provided the the U.S. government that would be shared by the Native Americans and Native Hawai'ians collectively.

There are numerous valuable, peaceful, and humanitarian uses for an armored ship. These ships do not have to be purely for war.

Because there are numerous ways to create future armored ships, this section will look at a variety of possible ideas that the U.S. government and Native American governments might use to implement the underlying plan.

Note that it would be absurd for a single class of ship to include everything included here. Quality ships must have a clear purpose. At some point decisions need to be made about how the ship is designed. I recommend emphasizing the ability to rapidly respond to emergencies of all kinds.

I recommend concentrating on a ship that has the primary goal of rapid response to humanitarian emergencies but also equipped with sufficient military functionality to be of interest to the U.S. military.

Examples of the kinds of possible humanitarian emergencies the proposed ship might respond to include: earthquakes, hurricanes/typhoons, tsunamis, floods, wildfires, volcanic eruptions, droughts, disease outbreaks, tornadoes/cyclones, terrorism/mass violence, industrial explosions, industrial chemical releases, nuclear accidents, railroad accidents, aircraft crashes, and sea rescues.

This suggests the ship should have medical facilities, carry supplies, provide water, food, and electricity, have aircraft (especially helicopters), and have the ability to do emergency construction.

The ship needs to be able to move to emergency sites quickly. For a surface ship this might imply a catamaran or trimaran hull. A hovercraft or ground effect vehicle would be faster, but more expensive and complicated. The fastest method of travel (approaching the speed of sound and much faster than commercial aircraft) would be a supercavitating torpedo, but that would be incredibly expensive and complicated and severely limit the carrying capacity of the vessel. Some have expressed excitement about the prospect that a submarine using supercavitation could cross the Pacific Ocean in as little as 100 minutes. That figure is derived from the fact that the fastest a supercavitating bubble can travel underwater is the speed of sound underwater — about 3,600 mph or about 5,800 kph. There have been past proposals for large military vessels that

have very shallow submersibility. This reduces cost and complexity and increases carrying capacity and might still allow supercavitation.

My recommended military use is to support ground troops delivered by amphibious and airborne means.

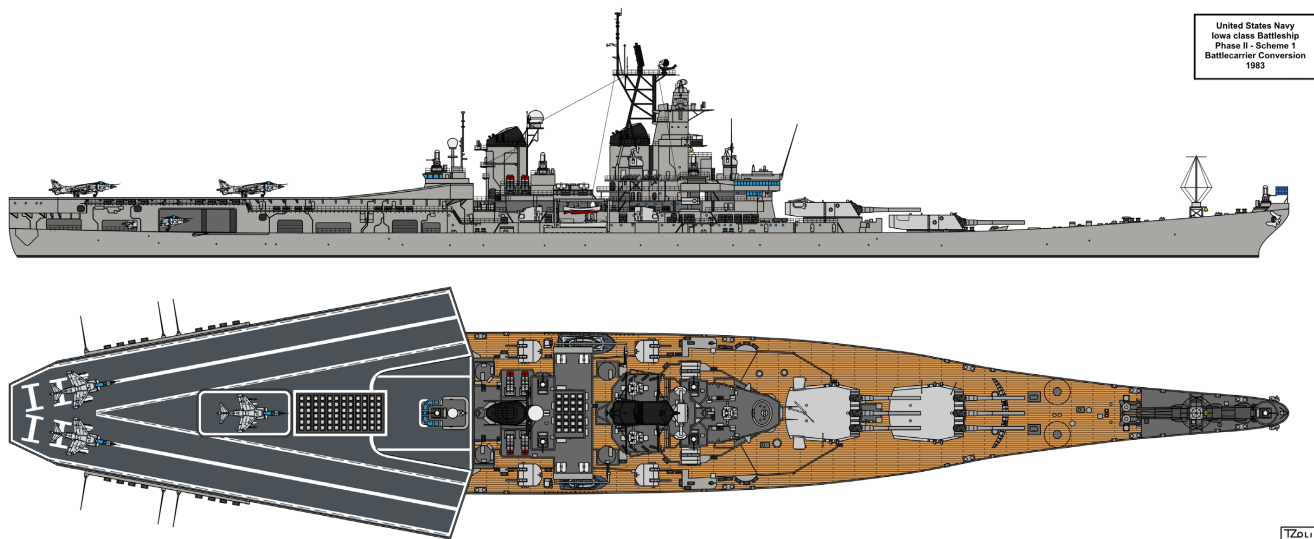
This would be based on the Soviet *Kiev*-class heavy aircraft carrier or the uncompleted *Iowa*-class Phase II Battlecarrier Conversion.



Soviet *Kiev*-class aircraft carrier (CVHG) *Novorossiysk*

photo by US Navy 25 March 1986

The U.S. Marine Corps keeps requesting a battle-ship style armored ship to support the Marines with shore bombardment.



Iowa Phase II Battlecarrier Conversion

by Tzoli 2015

It is likely that only two (2) to twelve (12) armored ships will be constructed and deployed.

While National Guards have access to regular U.S. military training programs, I recommend two customized basic training programs.

I recommend a full training program for front-line military personnel and support training program for those who will be located at bases and ports for support roles.

The support basic training should be flexible enough that anyone, even those with physical or mental disabilities, can be trained for useful support roles.

For the full training, I recommend four phases.

Phase I would be a combination of the basic trainings of the Army, Navy, Marine Corps, Air Force, Space Force, and Coast Guard. The U.S. use of several separate military services is based on out-dated European military structures of the 1700s which were in turn based on medieval militaries. This produces numerous inefficiencies and rivalries. It makes more sense to have one common basic training and have the flexibility for personnel to be assigned where needed.

If the proposed vessel has supercavitation, then Phase II would be similar to the U.S. Navy Basic Enlisted Submarine School ((BESS) covering fire fighting, damage control, and submarine escape.

Phase III would be the Basic Airborne Course (BAC), either at Fort Benning, Georgia, or at the Native National Guard training bases. The proposed program would include helicopter rappel training.

Phase IV would include the combined police, fire, and paramedic (or EMS) training. Sunnyvale, California, Department of Public Safety created a Public Safety Office which combines police, fire, and EMS. Sunnyvale DPS can send out its personnel to flexibly respond to police, fire, and medical emergencies. There are substantial problems with the Sunnyvale DPS's implementation of the training, but the underlying idea is still useful. Military police training would supplement civilian police training. It is important to solve the problem of racism, bigotry, and violence that currently infects U.S. police forces.

The proposed armored ships will need support from bases and ports.

Massive support infrastructure is required to support these ships. Much of that infrastructure includes things that Native American nations and the Kingdom of Hawai'i need.

The bases of the proposed Native National Guard can provide both jobs and direct civilian support to the 574 Native American nations and the Kingdom of Hawai'i.

I propose that each of the 574 Native American nations and the Kingdom of Hawai'i be given at least one base each, with multiple bases for the larger nations.

In addition to direct support of the fleet operated by the Native National Guard, the bases can provide jobs and substantial civilian support for all 574 Native American nations and the Kingdom of Hawai'i.

None of this is proper reparations or in any way makes up for past genocide against Native American nations and the Kingdom of Hawai'i. None of this should interfere with the eventual complete restoration of land stolen from Native American nations and the Kingdom of Hawai'i. The goal is to divert as much of the inevitable military money as possible to useful purposes in a way that helps Native American nations and the Kingdom of Hawai'i.

As sovereign nations, Native American nations and the Kingdom of Hawai'i have every right under international law to wield military might.

Jim Thorpe

Jim Thorpe, Sac and Fox Native American, originally named Wa-Tho-Huk (translated as "Bright Path"), born 22 or 28 May 1887, died 28 March 1953, was an American athlete and Olympic decathlon and pentathlon gold medalist.

Thorpe grew up on the Sac and Fox Nation reservation in Indian Territory (now Oklahoma). He won his gold medals in the 1912 Summer

Olympics in Stockholm, Sweden, an All-Around Championship of the Amateur Athletic Union, a major league baseball player with the New York Giants, winner of three professional football championships with the Canton Bulldogs, played for six teams in the National Football League, and was a professional basketball player on an all Native American team. He briefly was on a Toronto, Canada, professional ice hockey team.

In college (Carlisle Indian Industrial School) Thorpe was a two-time All-American on coach Pop Warner's Carlisle Indian Industrial School football team and competed in track and field, football, baseball, lacrosse, and ballroom dancing, winning the 1912 intercollegiate ballroom dancing championship. On the college football team, he played as a running back, defensive back, placekicker, and punter. He led his team to a 18-15 upset of Harvard (scoring four field goals), the top ranked team in the National Collegiate Athletic Association. In a 1912 27-6 victory over the West Point Army team, Thorpe scored a 92-yard touchdown, which was nullified by a teammate's penalty, but in the next play scored a 97-yard touchdown that counted.

Thorpe is was chosen as the greatest athlete for the first 50 years of the 20th century.

NOTE: I intend to place a brief biography of a famous Native American at the end of every chapter.



Jim Thorpe while playing for the Canton Bulldogs

Heritage Auctions, between 1915 and 1920

armored ships

armored ships

Armored ships are not just good for combat. The same armor allows them to survive severe weather that would sink many other ships. An armored ship can get close to shore and go into ports without fear of being seriously damaged or sunk.

After the sinking of the Russian cruiser *Moskva* (flagship of the Russian Black Sea fleet) by two old-tech, shore launched Neptune missiles, numerous navies, including the U.S. Navy and U.K. Royal Navy have pulled out previous plans for a modern armored ship that can withstand multiple missile attacks.



sinking of the Russian cruiser *Moskva* 13 April 2022

During testing after the end of WWII, two battleships (the *New York* and the *Pennsylvania*) survived nuclear explosions with minimal damage.

These ships will be extremely expensive and many of them will be needed. Ideally, for each ship on forward deployment, there need to be two additional ships, one going through regular maintenance and crew training and another undergoing more extensive work or other purposes. It is possible to do it with two ships per forward deployment location.

The *Moskva* was heavily armed with high tech defense systems against missiles, bombs, torpedoes, and cyber attacks. Numerous smaller ships, jets, surveillance systems including tracking satellites, and submarines were assigned to guard the flag ship. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

U.S. Admiral James Stavridis, retired former NATO supreme allied commander, called it “a gut punch to the Russian military and the Kremlin ... a stark reminder of the vulnerability of surface ships—including aircraft carriers, the heart of the U.S. Navy—to relatively low-cost, numerous, and technologically advanced cruise missiles.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

Large ships are now vulnerable to land-launched missiles anytime they are near shore. China has been building ship-killers for more than a decade and now has anti-ship cruise and ballistic weapons that can be fired from land, sea, or air. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

China can launch swarms of hundreds of hypersonic missiles in seconds. Travelling at six times the speed of sound (Mach 6) or faster with a range of more than a thousand miles, or less than a minute and a half to hit an aircraft carrier at the far end of the South China Sea. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

In a 20 December 2018 speech, Luo Yuan, retired People's Liberation Army Major General, laid out a war strategy for combating the U.S., calling U.S. aircraft carriers “a paper tiger.” Sarah Kirchberger, head of the Center for Asia-Pacific Strategy and Security at the Institute for Security Policy at Kiel University in Germany, called Luo's strategy “Pearl Harbor 2.0.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

China practices using anti-ship missiles against mock-ups of U.S. aircraft carriers. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

Luo claimed, “historical experience tells us that the United States is most afraid of people dying. ... If we sank one of their carriers, this would cause 5,000 casualties; if we sank two: 10,000 casualties—don't you think America would be afraid?” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

Kirchberger predicted that U.S. ship defense systems could not stop a Chinese hypersonic

missile swarm attack. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

Air Force General John Hyten, former vice chairman of the Joint Chiefs, pointed out that U.S. forces “failed miserably” in a 2021 simulated battle against China. “An aggressive red team [representing China] ... just ran rings around us. In today’s world, with hypersonic missiles, with significant long-range fires coming at us from all domains, if ... everybody knows where you are, you’re vulnerable.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

An unnamed Naval War College professor said, “The Chinese have made operations in the Western Pacific a dangerous place with the panoply of weapons they can bring to bear.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

A U.S. Navy pilot said, “[Our] country’s antiquated predilection toward carrier diplomacy is a strategic liability in a near-peer [China and Russia] wartime environment ... Though our ship’s defense systems are more robust and capable than a *Slave*-class cruiser [such as the *Moskva*, we are certainly vulnerable, especially carriers.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

Great ships look majestic and awe-inspiring on the surface of the sea. But when sunk, they are just barnacle-encrusted vanity. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

This is the threat battleships were made for.

Over a two day battle in gale-force winds, the German battleship *Bismark* sustained severe damage, including loss of all four main battery turrets, all of the control from its superstructure, and numerous other critical systems, yet was still afloat. The ship was sunk by its own crew to prevent allied capture of then-advanced technology.

The Japanese battleship *Yamato* sustained attacks from 386 aircraft in four waves over more than four hours, hit by 11 to 13 torpedoes and at least six bombs before sinking. The sister battleship *Musashi* was hit by 19 torpedoes and 17 bombs before sinking.

The key feature of large armored ships is the ability to sustain numerous direct hits and keep on fighting. The ships are extraordinarily difficult to sink.

The reason the Japanese surrender was signed on the battleship *Missouri* was because the Americans feared a surprise attack by either rebel elements of the Japanese military or by ordinary Japanese civilians. It was one of the few ships that could be brought into a hostile harbor and not be bothered by shore attack.

A modern armored ship could carry between half and full complement of aircraft of a *Ford*-class super carrier (depending on configuration), many times the missiles of a modern *Ticonderoga*-class guided-missile cruiser (also known as an Aegis cruiser), more intercontinental

ballistic missiles than a *Columbia*-class nuclear-powered ballistic missile submarine, 1,800 Marines with landing craft, and more, all while being exceedingly difficult to sink. it could even be built as a semi-submersible or fully submersible ship, allowing it to lurk unseen until needed.

➤ From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

Until fairly recently, the U.S. Navy leaned away from using surface ships in an anti-ship role, preferring aircraft and submarines. With the advent of “distributed lethality,” or the idea of networking everything that flies or floats into a giant kill-chain however, surface vessels have gotten back into the job of ship-killing.



Soviet *Kiev*-class aircraft carrier (CVHG) *Novorossiysk*

photo by US Navy 25 March 1986

Everybody likes big boats; we cannot lie. And the Russians have undoubtedly put its massive *Pyotr Velikiy* battlecruiser to good propaganda use over the past decade. Given the expansion of the Chinese surface fleet, it sure

would be nice to have some units capable of engaging both the surface ships of the PLAN, and the anti-access/area denial system that is slowly extending into the South China Sea. In short, there is a strategic rationale for a modern battleship.

Perhaps more important, the technology has begun to shift in the direction of large surface combatants. Big ships can carry more VLS cells; they have more space for drones and guns; and they have the power generation capacity necessary to effectively employ lasers, railguns, and advanced sensor equipment. After seventy years in which it made little sense to build a surface combatant bigger than 10000 tons, there is once again a technological justification for big ships. We are already seeing the first steps toward this trend in the designs of the arsenal ship and the CGX, and in the construction of such large destroyers as the *Zumwalts*, the South Korean *Sejong the Greats*, and the Chinese *Type 055s*.

[O]ffensive and defensive weaponry have evolved such that size once again offers significant potential benefits, and in the People's Army Liberation Navy the U.S. Navy now faces its most significant long-run challenge since the Cold War, and possibly since World War II. Can, given other priorities, the United States undertake the construct of a new large surface combatant? Maybe; it depends on the commitment that the US government wants to make to the U.S. Navy.



Kirov-class battlecruiser in 1986

U.S. Defense Intelligence Agency

The Soviet *Kirovs* are the largest surface combatants built in the last seventy years. Displacing 24,000 tons, they check many of the main boxes on what a modern battleship should look like. *Pyotr Velikiy*, the only remaining *Kirov*-class battlecruiser in service (*Admiral Nakhimov*, her sister, has been in Russian modernization purgatory since 1999, but might eventually return to service, someday, maybe, who knows), carries 2 P-700 “Shipwreck” anti-ship missiles, an S-300 surface-to-air missile system, an array of anti-submarine weapons, and a variety of sensors designed to detect targets. Powered by a combination of nuclear reactors and conventional steam turbines, *Pyotr Velikiy* can make 32 knots. However, the *Kirovs* lack any significant land attack capability beyond a twin 130mm gun.

From the 1950s on, the U.S. Navy looked at a bewildering array of proposals for modernizing the *Iowa*-class battleships. Most of these involved ditching some portion of the main armament in favor of missiles or an expanded flight deck. Given the scarcity of enemy battleships that needed holes punched in them after World War II, it made little sense to keep all three 16” turrets. Plans for radical renovation of the *Iowas* inevitably ran aground on the shoals of fiscal necessity, however. When the construction of the *Kirovs* finally kick-started the modernization of the *Iowas* in the 1980s, the modifications were fairly minimal; the addition of anti-ship and land attack missiles, and the removal of a few five-inch guns. This produced a formidable land-attack platform, but not a ship that was particularly threatening to enemy vessels, or that was able to defend itself beyond its heavy armor.

But the idea for a huge arsenal ship remained all the rage in the 1990s, when it seemed that the United States could solve even the thorniest of problems with a volley of cruise missiles. Equipped with a 512-cell Vertical Launch System, the arsenal ship would have deployed off the coast of a prospective target, then saturated the unfortunate victim with wave after wave of Tomahawks. The largest version of the proposed ship would have displaced around 30,000 tons, and included some self-defense systems. The arsenal ship died, however, when it became apparent that the U.S. Navy would be able to convert some *Ohio*-class SSBNs into cruise missile trucks at a lower cost, and with greater survivability.

The Navy took a different tack with the CGX. Forseeing a need to replace the *Ticonderoga*-class cruisers in the not-too-distant future, the Navy envisioned a ship that would displace around 25,000 tons, equipped with many of the features that eventually ended up in the *Zumwalt* class destroyer. Compared with the *Zumwalt*, the CGX would have had enhanced air defense systems, ballistic missile defense capability, and a nuclear propulsion system to generate all of the necessary power. But in the end, the Navy couldn't force Congress to cough up enough money to buy an adequate number of *Zumwalts*, much less the CGX.

—[*What A 21st Century Battleship Could Look Like*](#), by Dr. Robert Farley, author of the *Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

In the budget released 31 August 2022, the Japan Ministry of Defense announced two 20,000 ton Aegis-equipped cruisers, to be commissioned by 2027 and 2028. Construction is planned to start in 2024. These are to be the largest class of surface combatant ships in the Japan Maritime Self Defense Force, each outweighting the Chinese *Type 055* and South Korean *Sejong the Great* classes combined. The new cruisers will be 210 meters long and 40 meters wide (the US *Ford* supercarrier is 337 meters long and 41 meters wide at the waterline).

The massive scale of the planned Japanese cruisers will allow stability under heavy seas, increased interception readiness, increased endurance at sea, and increased combat readiness. The two-stage missile shield consists of the Aegis Combat System as well as Patriot Pac-3 surface-to-air (SAM) batteries. The ships will be loaded with new missiles capable of defending against Hypersonic Glide Vehicles, a design that current ballistic missile defense systems can't reliably intercept.

New technology will allow a crew of just 110 sailors and officers to operate the cruiser, with private cabins for all onboard.

In addition to high tech missiles, the ships might be equipped with a new Unmanned Aerial Vehicle (UAV), possibly the General Atomic's MQ-9B SeaGuardian or the Northrup Grumman's Firebird, for anti-submarine patrol, offshore surveillance, target search, and observation support for ground attacks.

deployment

How many forward deployment locations are needed to cover the world?

Arafura Sea, Arctic Ocean, North Atlantic Ocean, South Atlantic Ocean, Bab el-Mandeb Strait (including Suez Canal), Baltic Sea, Bering Strait, Black Sea (including Turkish Straits), Cape of Good Hope, Caribbean Sea (including Panama Canal), South China Sea, Dover Strait, Drake Passage (Mar de Hoces), Hawai'i, Indian Ocean (including Diego Garcia), Sea of Japan (East Sea), Mediterranean Sea (including Strait of Gibraltar and Turkish Straits), Norwegian Sea, North Pacific Ocean, South Pacific Ocean, Strait of Hormuz, and Strait of Malacca.

That is a total of 22 forward deployed ships, which means at least 44 total ships, preferably 66 total ships. 50 ships might be a reasonable goal.

The US Navy currently has 11 nuclear-powered super carriers (10 *Nimitz*-class and 1 *Ford*-

class) and plans to build 9 more Fords.

A *Ford*-class carrier costs about \$10-billion.

It is likely that the US funding for armored ships will only be in the range of four (4) to twelve (12).

Note that the Russians created the *Kiev*-class heavy aviation cruiser (Тяжелые авианесущие крейсера) rather than a normal aircraft carrier because this designation allowed the ships to transit the Turkish Straits, while the 1936 Montreux Convention prohibited aircraft carriers heavier than 15,000 tons from passing through the Straits.

vulnerability

Modern naval ships, including cruisers, destroyers, submarines, and carriers, are all vulnerable to being sunk by a single anti-ship missile.

During the Falklands War, Britain lost the HMS *Sheffield* Type 42 Guided Missile Destroyer to a single Exocet missile, the HMS *Antelope* Type 21 Frigate to two 1,000 pound bombs that failed to explode, the SS *Atlantic Conveyor* roll-on / roll-off type container ship to two Exocet missiles, and three other ships lost to bombs.

In contrast, during World War II, the Japanese battleship *Yamato* was sunk by at least 11 (probably 19) torpedoes and six or more bombs during three attacks over an hour and a half involving 280 aircraft. The final sinking was caused by an explosion of one of the ship's bow magazines resulting in a mushroom cloud more than 6 kilometers (3.7 miles) tall seen 160 kilometers (99 miles) away on Kyūshū.



sinking of the Russian cruiser *Moskva* 13 April 2022

author unknown

The sinking of the *Moskva* drove home the need for armored ships.

The future generation(s) of armored ships are unlikely to bear much resemblance to the battleships of World War II and earlier.

Chief Solano



Chief Solano of the Patwin

illustration by Dorian Yamelson

Sem-Yeto, also known as Chief Solano, was a leader of the Suisunes, a Patwin people of the Suisun Bay region of northern California. The California county of Solano is named for him.

Sem-Yeto is controversial. He allied his people with General Mariano Guadalupe Vallejo of the Mexican army. He fought against other Native American nations on behalf of Mexico and against rebels fighting to have California become an independent nation and then part of the United States.

Land given to Sem-Yeto by the Mexican government, which he in turn gave to his people, was taken by the state of California and given to two Americans.

peaceful uses

peaceful uses

It may come as a surprise to many people that military vessels have numerous peaceful uses.

U.S. Navy ships have responded to humanitarian crises.

This includes responding to earthquakes, tsunamis, and hurricanes.

Large U.S. naval vessels, including aircraft carriers and battleships, have provided rescue personnel, electricity, fresh drinking water, food, medical supplies, and hospital services during major disasters.

U.S. combat engineers have rebuilt roads, bridges, buildings, and other structures after earthquakes.

The ships of the proposed Native National Guard can deploy quickly to major disasters around the world and provide vital humanitarian services.

The bases of the proposed Native National Guard can provide both jobs and direct civilian support to the 574 Native American nations and the Kingdom of Hawai‘i.

The ships of the proposed Native National Guard can be used for scientific research.

See also the following chapters:

humanitarian operations
disaster response
search and rescue

hospital
construction
scientific research
anti-piracy

Native American military tradition

Native American military tradition

Native Americans have a long tradition of being exemplary soldiers, sailors, Marines, and airmen in the U.S. military.

Native Americans serve in the United States Armed Forces at five times the national average. Native Americans have served in every major conflict for more than 200 years, from the Revolutionary War to Normandy on D-Day.

General Ely S. Parker of the Seneca Nation was General Ulysses S. Grant's military secretary in the **American Civil War** and wrote the final draft of the Confederate terms of surrender.

During **World War I**, 15,000 Native Americans volunteered despite being ineligible for the draft, with about two-thirds serving in the infantry. Native Americans veterans didn't have the right to vote until 1919 and Native Americans in general didn't have either U.S. citizenship or the right to vote until the Snyder Act in 1924. About five percent of Native American combat soldiers were killed, contrasted with only one percent of overall American combat forces. More than 10,000 Native American women joined the American Red Cross. Native Americans purchased more than \$25-million of war bonds, an average of about \$75 for every Native American.

During both **World War I** Choctaw transmitted coded messages. During **World War II** Navajo transmitted coded messages.

During **World War II** more than 44,000 Native Americans, including nearly 800 women, served on active duty, earning 71 Air Medals, 34 Distinguished Flying Crosses, 51 Silver Stars, 47 Bronze Stars, and five Medals of Honors.

During the **Korean War** between 10,000 and 15,000 Native Americans served in the U.S. military, with 194 dying in battle.

During the **Vietnam War** more than 42,000 Native Americans served in the U.S. military. 90% were volunteers. 226 Native Americans died in combat and five earned the Medal of Honor.

27 Native Americans earned the Medal of Honor.

reservation needs

reservation needs

common bases

Naval ships require substantial support infrastructure.

Later I propose the creation of at least one common base on new land adjacent to the current 326 reservations of the 574 Native American nations and the Kingdom of Hawai'i (plus new land so every nation has their own base), with additional bases in the interior of large population nations. Additionally, there is the need for ports, at least one on the east coast of the U.S. and one on the west coast of the U.S. And there is a need for training bases, a command center, supply depots, etc.

This plan envisions each of the 574 Native American nations and the Kingdom of Hawai'i each having their own Native National Guard with their own distinctive emblem that appears on their uniforms.

The armored ships and selected bases would be shared and governed collectively by the 574 Native American nations and the Kingdom of Hawai'i (*not* by the U.S. government or the U.S. military).

In addition to supporting the fleet of armored ships, these common bases can provide numerous peacetime services that many reservations desperately need.

This is discussed in more detail in the chapter on common bases.

“Native Americans are the most impoverished ethnic group in the United States.

According to a study done by Northwestern University, one-third of Native Americans live in poverty. The population has a median income of \$23,000 per year and 20% of households earn less than \$5,000 a year. Due to the oppression of Indigenous peoples, reservations cannot provide adequate economic opportunity. As a result, a majority of adults are unemployed.” —[5 Facts About Life on the Native American Reservations](#) by the Borgen Project

employment

Massive numbers of people will need to be employed to operate, maintain, and support the proposed Native National Guard fleet. Priority for jobs should first go to members of the 74 Native American nations and the Kingdom of Hawai‘i, including providing needed education and training for Native Americans and Native Hawai‘ians to fill these jobs.

- From [Reservation Living Conditions](#), by A Program of Partnership with Native Americans:

Typically, Tribal and Federal governments are the largest employers on the reservations. Many households are overcrowded and earn only social security, disability or veteran’s income. The scarcity of jobs and lack of economic opportunity mean that, depending on the reservation, four to eight out of ten adults on reservations are unemployed. Among American Indians who are employed, many are earning below poverty wages (2005 BIA American Indian Population & Labor Force Report).

The overall percentage of American Indians living below the federal poverty line is 28.2% (2008, American Indians Census Facts). The disparity for American Indians living below poverty on the reservations is even greater, reaching 38% to 63% in our service area (2006, National Center for Education Statistics, and other sources).

—[Reservation Living Conditions](#), by A Program of Partnership with Native Americans

housing

The bases need to provide needed housing for the members of the Native National Guard, their families, civilian base workers, their families, and additional housing should be constructed

at the same time for other members of the Native American nations and the Kingdom of Hawai'i.

“Forty percent of on-reservation housing is considered substandard (compared to 6 percent outside of Indian Country) and nearly one-third of homes on reservations are overcrowded. Less than half of the homes on reservations are connected to public sewer systems, and 16 percent lack indoor plumbing.” —[Housing & Infrastructure](#) by National Congress of American Indians

“There is a housing crisis in Indian country. Despite the Indian Housing Authority's (IHAs) recent efforts, the need for adequate housing on reservations remains acute. One legislator deplored the fact that “there are 90,000 homeless or underhoused Indian families, and that 30% of Indian housing is overcrowded and less than 50% of it is connected to a public sewer.” (March 8, 2004, Indian Country Today).” —[Reservation Living Conditions](#) by A Program of Patnership with Native Americans

[M]any American Indians are living in substandard housing. About 40% of on-reservation housing is considered inadequate (2003, U.S. Commission on Civil Rights). The waiting list for tribal housing is long; the wait is often three years or more, and overcrowding is inevitable. Most families will not turn away family members or anyone who needs a place to stay. It is not uncommon for 3 or more generations to live in a two-bedroom home with inadequate plumbing, kitchen facilities, cooling, and heating.

—[Reservation Living Conditions](#), by A Program of Patnership with Native Americans

utilities

The bases need to provide essential utilities for base operations and the adjacent reservations. This includes power generation, drinking water distribution, sewage treatment and waste disposal, telephone services, high speed internet service, and other basic utilities.

“In some areas, up to 50 percent of Native homes are without phone service.” —[Housing & Infrastructure](#) by National Congress of American Indians

➤ From [Reservation Living Conditions](#), by A Program of Patnership with Native Americans:

Further increasing the concerns with reservation housing is the noticeable absence of utilities. While most Americans take running water, telephones, and electricity for granted, many reservation families live without these amenities. On a seriously stretched budget, utilities are viewed as luxuries compared to food and transportation. Overcrowding, substandard dwellings, and lack of utilities all increase the potential for health risk, especially in rural and remote areas where there is a lack of accessible healthcare.

—[Reservation Living Conditions](#), by A Program of Patnership with Native Americans

health care

Military bases need health care facilities.

The health care facilities needed for the base should be expanded to provide health care to the entire community.

“Native Americans have the highest risk for health complications. Across the board, Native American health is disproportionately worse than other racial groups in the United States. This population is 177% more likely to die of diabetes and 500% more likely to die from tuberculosis. Native Americans also have a 60% higher infant mortality rate when compared to Caucasians. Most Native American reservations rely on the Indian Health Service, a severely underfunded federal program that can only provide for approximately 60% of the needs of the insured. That does not account for a majority of those on the reservations. Only about 36% of Native Americans have private health care and one-third of the non-elderly remain uninsured.”

—[5 Facts About Life on the Natie American Reservations](#) by the Borgen Project

➤ From [Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans:

The average life expectancy for Native Americans has improved yet still trails that of other Americans by almost 5 years’ (2010, HHS Indian Health Disparities Fact Sheet). About 55% of American Indians rely on the Indian Health Service for medical care (2006, Indian Health Facts). Yet, the Indian Health Care Improvement Act only meets about 60% of their health needs (2003, U.S. Commission on Civil Rights).

Due to underfunding, Indian Health Service facilities are crisis-driven and leave a wide gap in adequate and preventative health care for many Native Americans on the reservations. Pharmacies and doctor's offices outside of hospitals are completely non-existent in some communities.

—[Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans

air, rail, road, and water connections

Each base will need rail and roadway connections sufficient for rapid movement of military personnel and equipment. Most (if not all) of the bases will need at least a small airport and air traffic control. Bases adjacent to oceans, the Gulf of Mexico, navigable rivers, the Great Lakes, or other large bodies of water will need prts facilities for making water connections.

These same connections will be useful for the residences of the reservation as well.

education

Each base will need education facilities for the members of the Native National Guard and civilian employees, as well as for the families of each. These education facilities should be expanded to provide for the needs of the adjacent reservation.

➤ From [Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans:

Native students hold the highest national dropout rate. Conditions on reservations leave schools severely underfunded and many children are unable to attend. This delay in education leaves early childhood skills undeveloped. According to Native Hope, “Simple skills that many 5-year-olds possess like holding a crayon, looking at a book and counting to 10 have not been developed.” Inadequate education is highly reflective of Native American graduation rates. Native students have a 30% dropout rate before graduating high school, which is twice the rate of the national average. This number is worse in universities — 75% to 93% of Native American students drop out before completing their degrees. Such disparity between Native American students and their colleagues has inspired the increase in scholarships for this community.

—[Reservation Living Conditions](#), by *A Program of Patnership with Natvie Americans*

This proposal includes plans for a new military service academy of equivalent quality to the United States Military Academy (USMA) in West Point, New York, (the first engineering school in the U.S., M.I.T. was second), the United States Naval Academy (USNA) in Annapolis, Maryland, the United States Coast Guard Academy (USCGA) in New London, Connecticut, the United States Merchant Marine Academy (USMMA) in Kings Point, New York, and the United States Air Force Academy (USAFA) in Colorado Springs, Colorado.

In addition to a main campus, it is proposed for there to be several satellite schools located in major Native American nations and the Kingdom of Hawai'i.

emergency services

Each base will need emergency services. These emergency services should also serve the adjacent reservation.

legal services

It is normal for military bases to provide free legal services through the Judge Advocate General Corps. These services should also be made available to the members of the Native American nations and the Kingdom of Hawai'i.

The Judge Advocate General Corps also provides the legal services needed by the base command. These services should also be made available to the governments of the corespondng Native American nations and the Kingdom of Hawai'i.

food

Each base will need to provide meals to those who work on the base. The capacity should be expanded to provide meals for the members of the reservation.

When possible, the food needed for the bases and the armored ships should be grown on reservations. Each Native American and Native Hawai'ian Native National Guard should be directly involved in food production, including construction and maintenance of irrigation, on reservations.

shopping

It is normal for military bases to have a commissary (for groceries) and a post exchange (for other goods) which provide servcie members and their families with substantial discounts compared to for-profit civilian stores.

In consultation with each Native American and Native Hawai'ian government (to prevent

undue competition with existing tribal and tribe member services), these facilities or portions of these facilities should be made available to the members of the corresponding nations.

technology

I propose standardized devices for computing, communications, and other needs. I further propose that every member of any of the 574 Native American nations and the Kingdom of Hawai'i be issued their own personal copy of these devices.

infrastructure

infrastructure

While large armored ships are expensive, a far greater cost is the infrastructure needed to build, crew, supply, maintain, and operate them.

These large armored ships will constitute a fleet owned and operated by Native American nations. Individual ships may have solo missions or be integrated into various groups (such as task forces, strike group, battle group, or other combination) with other Native National Guard vessels or integrated into various groups with regular U.S. Navy vessels.

build

Building large ships takes years to plan and then years to build.

The capabilities to build the large armored plates for a battleship or other armored ship were scrapped after the end of World War II and don't currently exist anywhere on the planet.

The U.S. Navy would certainly like the idea, because they would have the use of these ships without the cost coming out of their budget.

Does it make any difference to the large defense contractors whether they build ships for the U.S. government or for Native American nations? They would probably like the idea that there would be an additional large military budget beyond what they already have access to.

ports

This fleet needs ports. At a minimum, a port on the west coast of the U.S., on the east coast of the U.S., and on Hawai'i. More likely it will need additional ports in friendly nations around the world.

Ideally these will be ports under the control and ownership of Native American nations.

crew

The crew for this fleet of ships needs to be trained and then based when not out underway.

Some of the personnel will be on the ships underway, some at the ports, and some at other bases and infrastructure.

training

The crew for this fleet need to be trained. Some training can occur on the ships, but there is also a need for additional landside training bases.

supply

This fleet needs to be supplied. This includes facilities for storing supplies (both in ports and at other bases and distribution centers). This also includes obtaining the supplies and distributing them.

maintain

This fleet needs to be maintained. This includes routine maintence and major overhauls.

operate

This fleet needs to be operated around the world.

command

The fleet and additional infrastructure of the Native National Guard needs a command structure, which implies at least one major headquarters.

air and land vehicles

This fleet needs support from air and land vehicles. This includes airfields.

other infrastructure

Additional infrastructure includes such things as a service academy, with satellite schools at

several Native American reservations.

bases

I propose that each of the 574 Native American nations and the Kingdom of Hawai'i be given at least one base each, with multiple bases for the larger nations. There are currently 326 reservations, so for many nations this will be recovered sovereign land.

In addition to direct support of the fleet operated by the Native National Guard, the bases can provide jobs and substantial civilian support for all 574 Native American nations and the Kingdom of Hawai'i.

governance

The Native National Guard needs to be governed by the 574 Native American nations and the Kingdom of Hawai'i. That implies (but does not require) a treaty between the 574 Native American nations and the Kingdom of Hawai'i and a subsequent system for the 574 Native American nations and the Kingdom of Hawai'i to govern over the Native National Guard. The 574 Native American nations and the Kingdom of Hawai'i can figure out how to govern the Native National Guard.

ship summary

ship summary

Naming: Under U.S. Navy ship naming rules, a ship cannot be named for a president who wasn't a member of the U.S. military. That excludes Clinton, Obama, Trump, and Biden. I recommend that these armored ships be named for famous Native Americans or anything from Native American culture, the names being chosen by a vote by Native Americans.

Numbers: Most likely there will be around two (2) to six (6) of these ships, although if the Navy or Congress likes them, there could be more.

Armored: The ship must be armored to withstand multiple missile, bomb, torpedo, drone, fast boat, and other attacks.

Power: The ship should be powered by a nuclear power plant capable of producing enough excess electricity to temporarily supply a city with emergency power. This is to be backed by traiditonal steam turbine power so the ship can continue to safely operate if the nuclear power plant is scrambled.

Propulsion: The ship should be able to move fairly fast on the surface (33+ knots). Ideally it should also be supercavitating (up to the speed of sound underwater — about 3,600 mph or about 5,800 kph), allowing it to respond to natural disasters anywhere in the world in just a few hours.

Semisubmersibility: As hinted to just above, the ship ideally should be semisubmersible. It is not currently possible to put all of the proposed capabilities into a vessel that can submerge deep into the ocean. Semisubmersibility allows shallow depth (such as about 125 feet), allowing the use of supercavitation. The semisubmersibility allows for stealth and extends operational capability into the most severe weather conditions. With supercavitation to arrive on scene quickly and semisubmersibility, the ship could potentially arrive to the scene of hurricane or typhoon while the storm is still raging and start emergency disaster responses right away.

Weaponry: The ship should have sufficient weaponry, both traditional (naval guns, torpedoes, traditional missiles) and high tech (laser and energy weapons, hypersonic missiles, rail guns), to meet the demands and needs of the U.S. Navy. According to the Navy's own studies in 1991 showed that a semisubmersible design would allow for massive increases in space and carrying capacity, creating a ship that doesn't need the large number of support ships in a current super carrier group. While I oppose war, this project is dead in the water (pun intended) if the ship doesn't meet their needs. The extra space and carrying capacity can be used to carry the personnel and equipment for peaceful emergency and disaster response.

Flight: The ship should carry a combination of manned jets, planes, and helicopters. The number will probably be around the same as that of a modern super carrier. The ship should also be able to deploy drones for a wide variety of purposes, including 3D printing new specialty drones for unexpected purposes.

Rescue: The ship should have sufficient personnel and equipment to start rescue operations after a natural disaster. The personnel and equipment can be deployed by airborne drop, helicopter, or small boats.

Fire: The ship should have the capability to fight fire on other ships or on locations located along the water front.

Medical: The ship should have the medical facilities of a modern hospital ship. This also includes the ability to deploy and operate emergency field hospitals on land.

Emergency construction: The ship should carry the personnel and equipment needed for emergency construction work. These will be deployed from a floodable docking area in the rear of the ship. This includes the quick construction or repair of airstrips for bringing in emergency help by plane from around the world, including the ability to act as air traffic control if local facilities have failed.

Emergency communications: The ship should be able to operate as an emergency communications center, including the ability to provide an emergency on-ship command center for use by local authorities. The ship should also have the ability to broadcast from on-ship studios in HDTV, UDTV (when that becomes available), FM, AM, and short wave, as well as a print shop for the fast creation of printed materials, in a wide variety of languages.

Emergency supplies: The ship should be able to carry and distribute emergency supplies, including food, water, clothing, and emergency shelter.

Peacekeeping: The ship should be able to perform peacekeeping operations, including facilitating diplomacy to prevent or end wars.

Search and rescue: The ship should be able to perform search and rescue operations under extreme weather conditions, including the ability to be operate as an icebreaker in the Arctic or Antarctic. It should be able to rescue people from a sinking ship.

Cultural exchange: The ship should be able to visit ports around the world and help people learn about Native American culture.

Scientific research: The ship should be able to conduct scientific research.

Education: The ship should include educational facilities, both for normal crew training and for students working on the scientific research.

You can now go on to either the evaluation of possible missions or skip to the discussion of how this plan might be implemented and how it would help Native American nations.

missions
Native National Guard

ship design ideas

The next chapters go into details about how to design an armored ship that meets the needs of the U.S. military and also provides substantial humanitarian and peaceful benefits.

Many people will find this entire section boring.

missions
Native National Guard

Note that it would be absurd for a single class of ship to include everything included here. Quality ships must have a clear purpose. At some point decisions need to be made about how the ship is designed.

I recommend concentrating on a ship that has the primary goal of rapid response to humanitarian emergencies but also equipped with sufficient military functionality to be of interest to the U.S. military.

- From [German Pocket Battleships](#), by Ryan Szimanski, curator of Battleship New Jersey:

‘

Graf Spee is an extremely innovative ship. In the 1920s and 30s when this class of ship was designed and built, it was a good idea. And the fact that the Germans specifically designed them for one thing, these are going to be good at commerce raiding, and they did a ton of innovation to make them specifically good at that one thing. They don't do like other ships they build, specifically like under the Kriegsmarine. Fascist states tend to build much larger phallic symbols of your dictatorship and you try to throw the kitchen sink on, it's got to be good at this, good at that, and this. This being a Kriegsmarine German design that predates Hitler means that they just trying to do the one thing good. Commerce raiding, we're putting on an innovative gun system for that, putting on an innovative propulsion system for that, we're armoring it specifically for that, you can't fight battleships, she can outrun them all better. I think very highly of these ships. They capture my imagination.

—[German Pocket Battleships](#), by Ryan Szimanski, curator of Battleship New Jersey

The future generation(s) of armored ships are unlikely to bear much resemblance to the battleships of World War II and earlier.

Some of the ideas proposed by the U.S., U.K., defense contractors, college professors, and others:

- trimaran stealth hull made of ultra-strong acrylic see-thru composites
- small-waterplane-area twin hull (for operation even in the worst weather)
- 3-D holographic command table in a high tech Star Trek-like command center
- advanced sensors
- instead of a mast, a quad-copter tethered with carbon nanotubes and cryogenically cooled with multi-spectral sensors and high-power laser weapons
- modern armor
- large naval guns
- electro-magnetic rail guns
- missiles (one proposal includes 512 launch tubes)
- hypersonic missiles
- supercavitating torpedoes
- laser weapons
- directed energy microwave weapons
- floodable dock area for deploying amphibious attacks and underwater vehicles
- hangar and extendable flight deck
- air, surface, and submarine drones
- locally 3-D printed drones
- helicopters
- fighter and other jets
- fusion reactor power backed by highly efficient conventional steam power turbines
- submersibility

armor

armor

The three major trade-offs in a battleship are: armor, speed, and guns.

Traditionally, the armor of a battleship is sufficient to protect it from a ship with equivalent weaponry.

Modern naval ships, including cruisers, destroyers, submarines, and carriers, are all vulnerable to being sunk by a single anti-ship missile.

During the Falklands War, Britain lost the HMS *Sheffield* Type 42 Guided Missile Destroyer to a single Exocet missile, the HMS *Antelope* Type 21 Frigate to two 1,000 pound bombs that failed to explode, the SS *Atlantic Conveyor* roll-on / roll-off type container ship to two Exocet missiles, and three other ships lost to bombs.

In contrast, during World War II, the Japanese battleship *Yamato* was sunk by at least 11 (probably 19) torpedoes and six or more bombs during three attacks over an hour and a half involving 280 aircraft. The final sinking was caused by an explosion of one of the ship's bow magazines resulting in a mushroom cloud more than 6 kilometers (3.7 miles) tall seen 160 kilometers (99 miles) away on Kyūshū.

Further, the allies first sank all of the *Yamato*'s support ships before turning their attention on the *Yamato*. Major damage to the *Yamato* did not start until after all of the barrels overheated on her anti-aircraft guns and she stopped shooting down allied aircraft. Even when defenseless, it still took hundreds of aircraft to deliver enough damage to sink the ship.



sinking of the Russian cruiser *Moskva* 13 April 2022

author unknown

The sinking of the *Moskva* drove home the need for armored ships.

➤ From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

‘

Great ships look majestic and awe-inspiring on the surface of the sea. But when sunk, they are just barnacle-encrusted vanity. —[Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

[A] battleship needs to defend itself. From ironclad to dreadnought, battleships carried heavy armor to defend themselves against the heavy shells of enemy battleships, and eventually to protect themselves against torpedoes and bombs.

Naval architects effectively gave up on armor in late October 1944, when swarms of American carrier aircraft sank IJMS *Musashi*, the largest and most heavily armored battleship ever constructed. After World War II, the focus shifted to prevention, with ships attempting to defeat incoming aircraft and missiles with their own missiles, or with close-in guns. Although this approach

has saved a lot of dead weight, it has its own limitations; in the Falklands War the Royal Navy lost ships from missile strikes even when the warhead failed to explode.



HMS Glatton's partially water-filled anti-torpedo bulges

Since the 1970s, modern warships have moved slightly in the other direction, adding lightweight Kevlar armor to protect the most critical areas of the ship from gunfire and other kinds of explosions. Similarly, most designers have moved away from aluminum superstructures in favor of steel, which offers greater protection from small arms and small caliber guns. Against large missiles or heavy artillery, modern ships remain extremely vulnerable.

Heavy armor can protect hulls and gun turrets, but superstructures were always vulnerable to shellfire. As the fighting power of a ship increasingly rests on its sensor and electronic systems, heavy protection for the hull offers limited returns for the weight added. A World War II battleship could continue fighting even after its upper works were ravaged by guns; a modern warship can't.

—[*What A 21st Century Battleship Could Look Like*](#), by Dr. Robert Farley, author of the *Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

nuclear weapons

It may come as a surprise that heavily armored ships can survive even direct hits by nuclear explosions.

Operation Crossroads was a pair of nuclear weapon tests at Bikini Atoll in 1946 conducted on a fleet of 95 target ships. The first test was *Able*, where the bomb named *Gilda* was dropped by *Dave's Dream*, a B-29 Superfortress, on 1 July 1946, detonating 158 meters above the target fleet. The second test was *Baker*, where the bomb *Helen of Bikini* was detonated 27 meters underwater on 25 July 1946.

The USS *New York* (BB-34), a *New york*-class battleship, survived both the surface and underwater blasts with minimal damage. Later the ship was towed to sea about 65 km off Pearl Harbor and on 8 July 1948 was bombarded by ships and planes conducting full-scale battle maneuvers for 8 hours before finally sinking.

The USS *Pennsylvania* (BB-36), a super-dreadnaugh battleship, survived both nuclear explosions with minor damage.

The *Prinz Eugen*, a German *Admiral Hipper*-class heavy cruiser, survived both atomic bombs with no structural damage.

In contrast, the two aircraft carriers, the USS *Saratoga* (CV-32), a *Lexington*-class aircraft carrier, and the USS *Independence* (CVL-22), a light aircraft carrier, were damaged beyond repair.

modern armor

hull

hull

If the proposed ship is semisubmersible, then many hull designs are possible. If the ship is fully submersible, the pressure of the depths of the ocean dictate severe limits on the size, interior space, and shape of the hull.

submarine hulls

➤ From [Typhoon-class submarine](#), Wikipedia:

The largest submarine made, the Soviet/Russian *Typhoon*-class, Project 941 *Akula* (Акула, or shark), was made with “multiple pressure hulls, which simplifies internal design while making the vessel much wider than a normal submarine. In the main body of the sub, two long pressure hulls lie parallel with a third, smaller pressure hull above them (which protrudes just below the sail), and two other pressure hulls for torpedoes and steering gear. This also greatly increases their survivability – even if one pressure hull is breached, the crew members in the other are safe and there is less potential for flooding.



Typhoon-class submarine underway at sea.

[Bellona Foundation](#)

The *Typhoon*-class submarine was so large that “in the early 1990s, there were proposals” to use the submarines as “submarine cargo vessels for shipping oil, gas and cargo under polar ice to Russia's far flung northern territories. The submarines could take up to 10,000 tonnes of cargo on-board and ship it under the polar ice to tankers waiting in the Barents Sea.

—[Typhoon-class submarine](#), *Wikipedia*

Malachite Design Bureau of St. Petersburg (Formerly Leningrad and Petrograd) has designed a submarine called the *Pilgrim*, which would be used for transporting liquid natural gas (LNG) under the Arctic icecap. It would be capable of carrying 170,000 to 180,000 tons of LNG (the *Iowa*-class battleship had a full load displacement of 60,000 long tons or 61,000 tons and the modern *Gerald R. Ford*-class supercarrier has a full load displacement of 100,000 long tons). It would be 1,180 feet long (the *Typhoon* is 574 feet long) and 230 feet across (the *Typhoon* is 75 feet across), giving it more than six times the interior volume of the *Typhoon*. It would require three nuclear reactors, each producing 30 megawatts, and be capable of 17 knots, only slightly slower than a regular tanker.

Large Surface Combatant

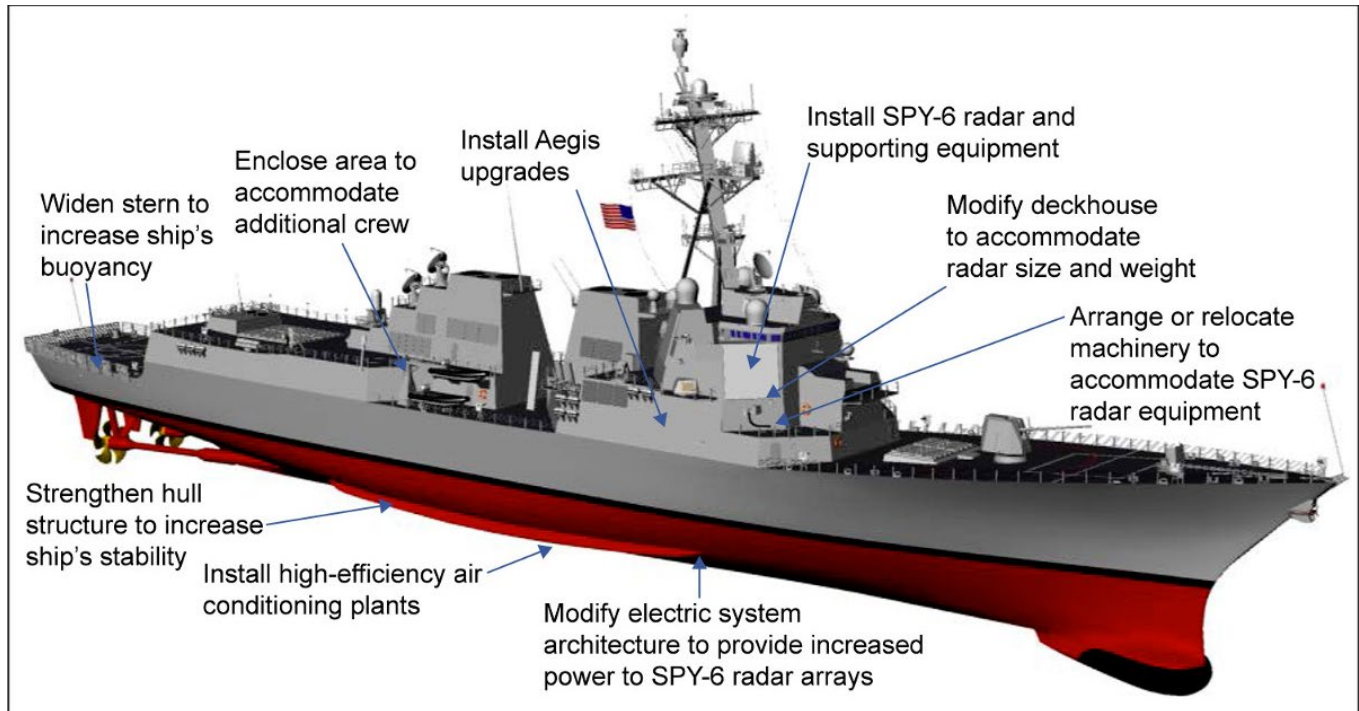
U.S. Navy Rear Admiral William Galinis, head of the Navy's Program Executive Office

Ships, discussed ideas for a new Large Surface Combatant (LSC).

“It’s going to be more of an evolutionary approach as we migrate from the DDG-51 [*Arleigh Burke*] Flight IIIs to the Large Surface Combatant,” Galinis said. The most recent *Arleigh Burkes* “kind of get to the naval architecture limits of the DDG-51 hullform.”

Galinis said the new hulls would be longer and stronger with a beefier deckhouse to hold upgrades and additional power generation.

“That’s going to bring a lot of incredible capabilities to the fleet but there’s also a fair amount of technical risk,” Galinis said.



Source: GAO (analysis); Navy (image and data). | GAO-16-613

breakdown of FLight III *Arleigh Burke* upgrade, 11 July 2018

GAO (analysis); Navy (image and data); GAO-16-613

other

futuristic ideas:

trimaran stealth hull made of ultra-strong acrylic see-thru composites



trimaran stealth hull for Dreadnought 2050 project

© Startpoint 2015

small-waterplane-area twin hull (for operation even in the worst weather)

length (between perpendiculars)					
ship	class	type	nation	English	metric
<i>Iowa</i>	<i>Iowa</i>	battleship	U.S.	860 ft	262.1 m
<i>New Jersey</i>	<i>Iowa</i>	battleship	U.S.	860 ft	262.1 m
<i>Missouri</i>	<i>Iowa</i>	battleship	U.S.	860 ft	262.1 m

<i>Wisconsin</i>	<i>Iowa</i>	battleship	U.S.	860 ft	262.1 m
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length (overall)					
ship	class	type	nation	English	metric
<i>Iowa</i>	<i>Iowa</i>	battleship	U.S.	887 ft 3 in	270.4 m
<i>New Jersey</i>	<i>Iowa</i>	battleship	U.S.	887 ft 3 in	270.4 m
<i>Missouri</i>	<i>Iowa</i>	battleship	U.S.	887 ft 3 in	270.4 m
<i>Wisconsin</i>	<i>Iowa</i>	battleship	U.S.	887 ft 3 in	270.4 m

beam					
ship	class	type	nation	English	metric
<i>Iowa</i>	<i>Iowa</i>	battleship	U.S.	108 ft 2 in	33.0 m
<i>New Jersey</i>	<i>Iowa</i>	battleship	U.S.	108 ft 2 in	33.0 m
<i>Missouri</i>	<i>Iowa</i>	battleship	U.S.	108 ft 2 in	33.0 m
<i>Wisconsin</i>	<i>Iowa</i>	battleship	U.S.	108 ft 2 in	33.0 m

draft (full load)					
ship	class	type	nation	English	metric
<i>Iowa</i>	<i>Iowa</i>	battleship	U.S.	37 ft 2 in	11.33 m
<i>New</i>	<i>Iowa</i>	battleship	U.S.	37 ft 2	11.33

<i>Jersey</i>				in	m
<i>Missouri</i>	<i>Iowa</i>	battleship	U.S.	37 ft 2 in	11.33 m
<i>Wisconsin</i>	<i>Iowa</i>	battleship	U.S.	37 ft 2 in	11.33 m

draft (maximum)					
ship	class	nation	type	English	metric
<i>Iowa</i>	<i>Iowa</i>	battleship	U.S.	37 ft 9 in	11.5 m
<i>New Jersey</i>	<i>Iowa</i>	battleship	U.S.	37 ft 9 in	11.5 m
<i>Missouri</i>	<i>Iowa</i>	battleship	U.S.	37 ft 9 in	11.5 m
<i>Wisconsin</i>	<i>Iowa</i>	battleship	U.S.	37 ft 9 in	11.5 m

submersibility

submersibility

The ship needs to be able to move to emergency sites quickly. The fastest method of travel (approaching the speed of sound and much faster than commercial aircraft) would be a supercavitating torpedo, but that would be incredibly expensive and complicated and severely limit the carrying capacity of the vessel. Some have expressed excitement about the prospect that a submarine using supercavitation could cross the Pacific Ocean in as little as 100 minutes. That figure is derived from the fact that the fastest a supercavitating bubble can travel underwater is the speed of sound underwater — about 3,600 mph or about 5,800 kph. There have been past proposals for large military vessels that have very shallow submersibility. This reduces cost and complexity and increases carrying capacity and might still allow supercavitation.

Air Force General John Hyten, former vice chairman of the Joint Chiefs, pointed out that U.S. forces “failed miserably” in a 2021 simulated battle against China. “An aggressive red team [representing China] ... just ran rings around us. In today’s world, with hypersonic missiles, with significant long-range fires coming at us from all domains, if ... everybody knows where you are, you’re vulnerable.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

The British Dreadnought T2050 would be submersible “to present a lower profile which would make the ship more stealthy and even harder to detect,” according to Muir Macdonald, a senior executive at Startpoint.



Dreadnought 2050 project

© Startpoint 2015

stealth

stealth

The *Gerald R. Ford*-class carriers have stealth features to reduce radar cross-section.

power plant

ship power plant

The proposal here is for the ships to have *both* nuclear and conventional steam power plants. Nuclear power plants provide far more power per weight and can run for years without resupply. They are fragile and can be brought off line by a major shock, such as a bomb, shell, missile, or torpedo explosion. The Soviet solution was to provide their nuclear surface ships with both a primary nuclear power plant and sufficient conventional power plant to power continued fight through one or more battles plus the ability to retreat for repairs under their own power.

“The new case for nuclear power focuses on the energy-hunger of modern weapon and sensor systems. In particular, the rail gun and laser systems would benefit enormously from high wattage reactors.” — [What A 21st Century Battleship Could Look Like](#) by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

The *Gerald R. Ford*-class carriers have a new nuclear reactor design (the A1B reactor) for greater power generation.

➤ From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

‘

The A1B nuclear reactors carried by the USS *Ford* class each generate 300MW of electricity, well in excess of what the ships currently require. Depending on the size of the hull, [a modern armored ship] could conceivably carry two reactors, providing for a high speed in addition to the power needed for sophisticated weapon systems.

Powered by a combination of nuclear reactors and conventional steam turbines, *Pyotr Velikiy* can make 32 knots.

—[*What A 21st Century Battleship Could Look Like*](#), by Dr. Robert Farley, author of the *Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

The new Bechtel A1B reactor for the *Gerald R. Ford*-class is smaller and simpler, requires fewer crew, and yet is far more powerful than the *Nimitz*-class A4W reactor. Two reactors will be installed on each *Gerald R. Ford*-class carrier, providing a power generation capacity at least 25% greater than the 550 MW (thermal) of the two A4W reactors in a *Nimitz*-class carrier, and three times that of “current carrier power plants”.

The propulsion and power plant of the *Nimitz*-class carriers were designed in the 1960s, when onboard technologies required less electrical power. “New technologies added to the *Nimitz*-class ships have generated increased demands for electricity; the current base load leaves little margin to meet expanding demands for power.”

The *Gerald R. Ford*-class ships convert steam into power by piping it to four main turbine generators (MTG) to generate electricity for major ship systems, and the new electromagnetic catapults. The *Gerald R. Ford*-class ships use steam turbines for propulsion.

A larger power output is a major component to the integrated warfare system. Engineers took extra steps to ensure that integrating unforeseen technological advances onto a *Gerald R. Ford*-class aircraft carrier would be possible. The Navy expects the *Gerald R. Ford*-class will be part of the fleet for 90 years, until the year 2105, which means that the class must successfully accept new technology over the decades. Only half of the electric power generation capacity is used by currently planned systems, with half remaining available for future technologies.

The T2050 is proposed to have fusion reactor power backed by highly efficient conventional steam power turbines.

The *Kirov*-class battlecruiser had both nuclear and conventional power with two KN-3 nuclear power plants and two GT3A-688 steam turbines.

The reason is that a large shock will scram a nuclear reactor. The steam turbines provided emergency back-up power so the ships could continue to operate.



Kirov-class battlecruiser in 1986

U.S. Defense Intelligence Agency

According to M.I.T., it can take less than two hours to restart a nuclear reactor if it has been operated within the last 24 hours. It takes at least two days to start a nuclear reactor from completely shut down.

➤ From [Why does it take so long to restart a nuclear power plant?](#), by Chuck:

When a reactor is shut down the core produces much less heat, but they *do* still produce heat through a mechanism known as [decay heat](#). The fact that the core is producing less heat means that the coolant temperature is going to drop, but how far that temperature drops depends on the decay heat generation rate. This in turn is based on operating history, or the power at which the plant was operating before shutdown. This can be large for commercial plants, because they typically operate at or very near capacity and the power companies bring coal or natural gas plants up and down to modulate grid capacity. Decay heat after a day is about half a percent of the power history, which, for a 500 MW plant operating at capacity, means that the decay heat could be 2.5 MW.

So, if there's a brief shutdown, the decay heat generation rate is so high that the primary plant stays hot and thus they can normally start up pretty "quickly". I say "quickly" because, while the *primary* (radioactive side) of the plant may still be hot, the secondary steam plant will likely have gotten cold. For secondary plant startups, one of the big concerns is moisture formation in the piping. This happens when steam touches the (relatively) cold pipe. Moisture in the steam plant can cause all kinds of terrible things, but primarily the damage comes from water hammer [the video referenced in the original material is no longer available] in the piping and moisture impingement of the turbine blades.

For the record: I know this because I was a Navy nuke. In my stint in the Navy, the most terrifying thing I ever witnessed on the ship was a steam pipe, maybe 18 inches in diameter, literally jumping 2-3 inches with every water hammer blow, knowing that if the pipe failed that everyone in the engineroom would probably be cooked alive. Keep in mind that, in the video linked above, the steam is likely at or just above atmospheric pressure and very low flow and it still sounds like someone's beating on that radiator with a hammer. That pipe is probably an inch or less in diameter.

The condensate that forms when the steam touches the piping gets "entrained" in the steam flow through the pipe. The steam pushes this plug of water at very high speed, like a hammer (hence "water hammer"), breaking turbine blades and damaging piping and especially piping joints.

There are devices called "moisture traps" or "steam traps" that remove moisture from the system during normal operation, but the volume of condensate formed on cold plant startup is so much that the moisture traps can't keep up. This, combined with the danger presented by water hammer and moisture impingement in the turbine means that steam is admitted to the steam plant very, very, very slowly. The plant operators have to periodically go around to manually-operated steam traps to "[blow down](#)" the condensate. (Note: the steam plant in that video is horrendous and I wouldn't work there, but the growling sound it makes when the condensate clears and steam starts to exit is exactly how I remember it sounding).

So to summarize to now: the "quick" (24-hour) startup is typically limited by moisture generation in the secondary steam plant, caused by steam contacting cold pipes.

The *primary* plant start has the potential to take much, much longer. Most (all?) reactors in the US are [pressurized water reactors](#). This means that, despite being at 2-3 times (or more!) the temperature at which water normally boils, there is enough pressure in the primary plant to keep the water in its liquid form. This is a **lot** of pressure, and the piping in the primary plant has very thick walls

to withstand that pressure.

The thick walls means that there is the potential for the *inside* of the pipe to be “hot” while the *outside* of the pipe is “cold”. These are relative terms; everything is hot.

Warming up the primary plant is a chicken-and-egg problem. The primary concern here is ensuring that no steam ever forms in the reactor. Steam is actually a pretty good insulator, meaning that, if it ever *did* form in the reactor, suddenly there would be nothing to cool the fuel, so it would get very very hot very quickly (read: melt).

So, you have to keep the system pressurized high enough that steam doesn't form in the reactor. *BUT*, if you were to put that much pressure on the piping while it was cold, it would fracture, via a mechanism called, “brittle fracture”. This is a sudden and catastrophic failure that can be avoided if the piping is heated to the point that it has some ductility.

So, you need to heat the piping up, but you can't get it so hot that it boils. So you heat it a little, then increase the pressure a little, then heat, pressurize, etc.

Typically there are pauses known as “soaks”, which give the metal in the piping time to equalize temperature. This prevents internal stresses from building up because the inside of the pipe is “hot” and the outside is “cold”. The soaks normally take a large portion to a majority of the startup time - soaks are generally 12-24 hours.

So, you heat up to a soak point, then typically pressurize to an intermediate pressure, heat to another soak point, then increase pressure to a higher intermediate pressure, then heat and pressurize together. All of this is done to stay under fracture limits known as the “brittle fracture prevention limit”, which again, is to ensure that the temperature-pressure the piping is subjected to is such that the pipes don't fall off.

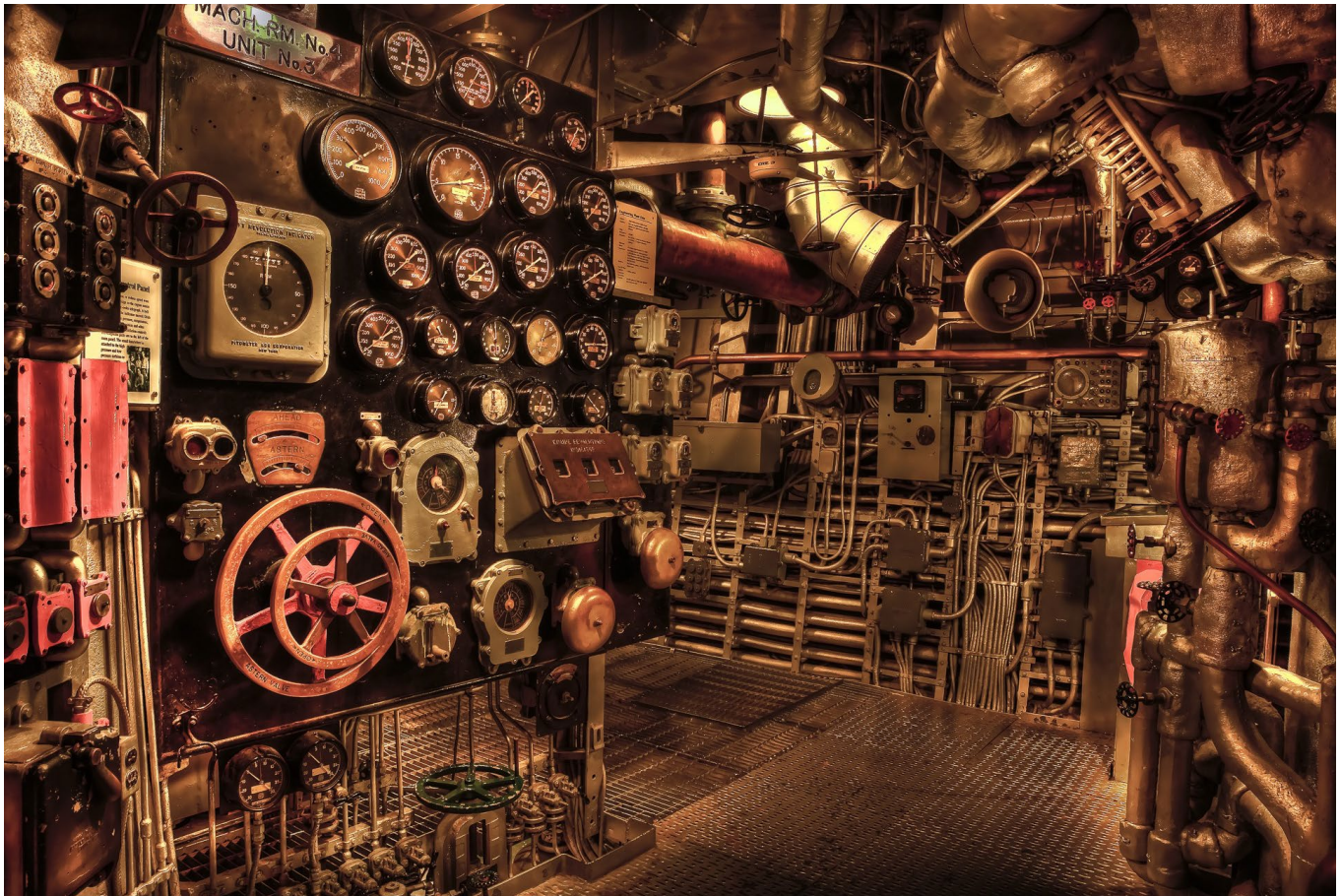
So, once you have warmed up the primary plant, then you can begin to bring the secondary plant online, so it's usually 2 days for the primary and then another day for the secondary - this is the 72 hour startup.

As mentioned, decay heat keeps the primary plant hot for a long time (up to maybe a month), so unless you're in an extended outage you can usually start up pretty “quick”, where again “quick” is about 24 hours.

I can't find any good resources for convective heat transfer coefficients online, but for *conduction*, $Q = mc\Delta T$. For a given *volume*, $m = \rho V$. Then, comparing the conductive heat transfer of an arbitrary volume of water to steam,

for the same temperature difference, $Q_{\text{water}}/Q_{\text{steam}} = (\rho c)_{\text{water}}/(\rho c)_{\text{steam}}$. Specific heat capacity of steam is about half that of water, but the density of steam is about 1/1000th of water, so water conducts heat about 2000x better than steam. Convection is similar, but maybe not as extreme.

—[Why does it take so long to restart a nuclear power plant?](#) by Chuck



battleship steam engine room
Image by [Gregory Butler](#)

propulsion

propulsion

The three major trade-offs in a battleship are: armor, speed (propulsion), and guns.

The *Iowa*-class battleships were stretched longer than other American battleships of the time, allowing similar armor and guns, but providing additional space for more powerful propulsion, making them the fastest battleships of World War II.

The ship needs to be able to move to emergency sites quickly. For a surface ship this might imply a catamaran or trimaran hull. A hovercraft or ground effect vehicle would be faster, but more expensive and complicated. The fastest method of travel (approaching the speed of sound and much faster than commercial aircraft) would be a supercavitation, but that would be incredibly expensive and complicated and severely limit the carrying capacity of the vessel. Some have expressed excitement about the prospect that a submarine using supercavitation could cross the Pacific Ocean in as little as 100 minutes. That figure is derived from the fact that the fastest a supercavitating bubble can travel underwater is the speed of sound underwater — about 3,600 mph or about 5,800 kph. There have been past proposals for large military vessels that have very shallow submersibility. This reduces cost and complexity and increases carrying capacity and might still allow supercavitation.

The *Iowas* were designed as fast battleships and were among the fastest large war ships ever made.

Nuclear submarines place a priority on propellers that don't make a lot of noise.



Susan Ford Bales, ship's sponsor for the aircraft carrier USS *Gerald R. Ford* (CVN-78), tours Dry Dock No. 12 at Newport News Shipbuilding prior to flooding the basin and floating *Gerald R. Ford* for the first time. 11 October 2013, 09:40

U.S. Navy

The propulsion and power plant of the *Nimitz*-class carriers were designed in the 1960s, when onboard technologies required less electrical power. “New technologies added to the *Nimitz*-class ships have generated increased demands for electricity; the current base load leaves little margin to meet expanding demands for power.”



The U.S. Navy aircraft carrier USS *Gerald R. Ford* (CVN-78) underway under her own power for the first time while leaving Newport News Shipbuilding, Newport News, Virginia (USA), on 8 April 2017. The first-of-class ship — the first new U.S. aircraft carrier design in 40 years — spent several days conducting builder's sea trials, a comprehensive test of many of the ship's key systems and technologies. USS *George Washington* (CVN-73) and the amphibious assault ship USS *Kearsarge* (LHD-3) are visible in the background.

U.S. Navy photo by Mass Communication Specialist 2nd Class Ridge Leoni

The *Gerald R. Ford*-class ships convert steam into power by piping it to four main turbine generators (MTG) to generate electricity for major ship systems, and the new electromagnetic catapults. The *Gerald R. Ford*-class ships use steam turbines for propulsion.

A U.S. Navy pilot described the speed and maneuverability of a modern U.S. aircraft carrier, “It’s amazing to be on board that ship when it kicks into gear. It’s impressive how maneuverable those things are.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

possible future ideas:

The British Dreadnought T2050 will use electrically-driven waterjet propulsors fitted in the outrigger amahs.

`img src="/nngpict/dreadnought2050flightdeck.png" width="700">`

Dreadnought 2050 project

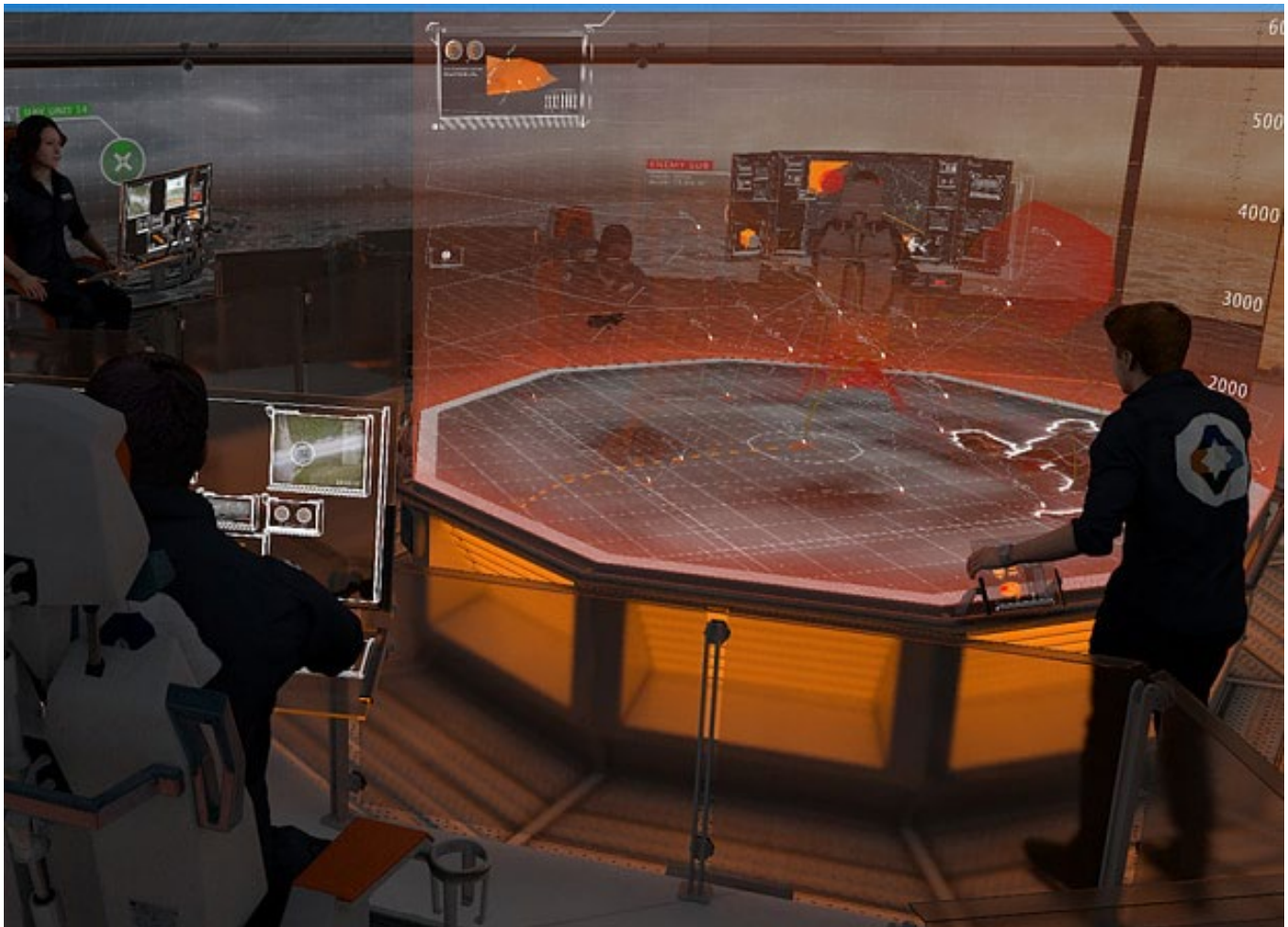
© Startpoint 2015

bridge

bridge

A key feature of the Dreadnaught 2050 design is its concept of the Operations or “Ops” Room, which is the command center of the ship, the ship operations, its helicopters and aircraft, and its landing parties. It would control operations from deep sea to deep space.

The main feature is a 3-D holographic command table and the surrounding communications hubs, providing a new level of situational awareness in a high tech Star Trek-like command center. The stereo visual display can be rotated and zoomed as the captain see fit, focusing on specific aspects of a battle at sea, on land, underwater, in the air, or even in space.



Dreadnought 2050 project

© Startpoint 2015

Smaller holographic pods allow the Operations crew to focus on the specific details of their assigned tasks.

The new technology will allow the captain to fix visual contact for thousands of miles, maintain secure real time voice, video, or data connections with headquarters back in Britain, with NATO, or with allied forces, according to Starpoint.



Dreadnought 2050 project

© Startpoint 2015

“While some of these technologies push today’s boundaries in science and engineering, there is no reason why elements could not be incorporated into future designs,” said Muir Macdonald, a Senior Executive involved with Startpoint. “The Royal Navy needs visionary, innovative thinking and these concepts point the way to cutting edge technology which can be acquired at less cost and operated with less manpower than anything at sea today in the world’s leading navies.”

sensors

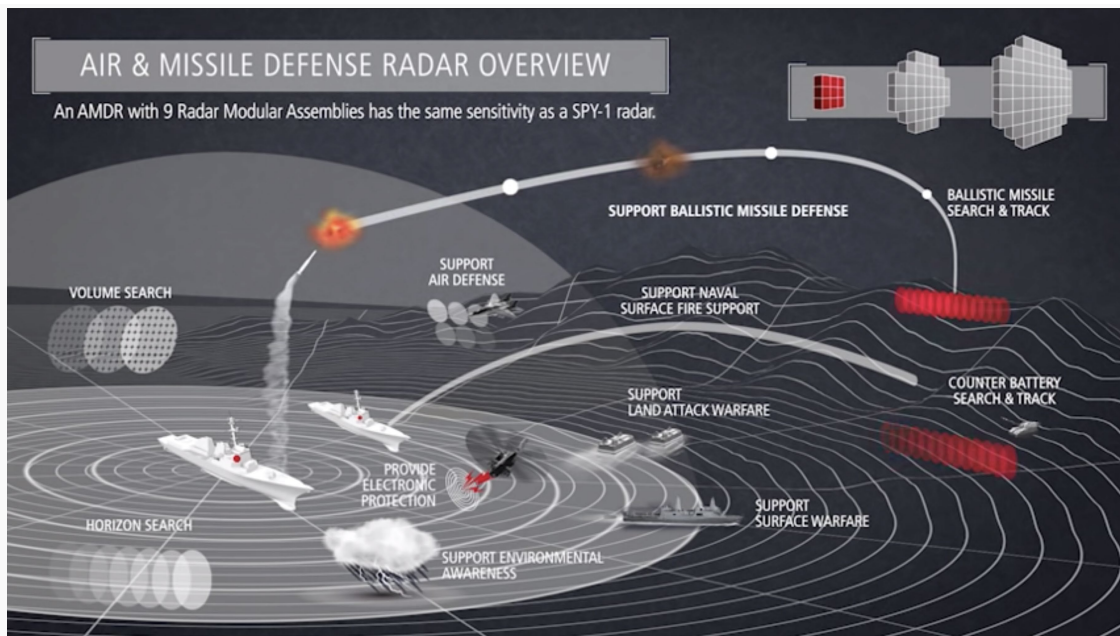
sensors

► From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

“

A battleship must have the capability to kill other ships. If it can't do this, then it isn't a battleship; it's a monitor, or "arsenal ship." This means that any modern battleship needs an array of sensors necessary to detect enemy ships, as well as guns and missiles capable of sinking them.

Sensor technology evolves rapidly, but we can say that [a modern armored ship] would need a full suite of air and subsurface sensors in order to adequately perform its multirole duties. The Air and Missile Defense Radar (AMDR, or AN/SPY-6), scheduled for fitting on the Flight III *Arleigh Burke* destroyers, would allow [a modern armored ship] to engage hundreds of targets simultaneously. The AMDR can detect targets half-the-size of older radars, at twice the range. Best of all, the AN/SPY-6 is scalable, meaning that [a modern armored ship] could employ a more powerful radar system than even the Flight III *Arleigh Burkes*. [a modern armored ship] would also require a sonar suite similar to that of the latest *Burkes*.



Air and Missile Defense Radar

Raytheon

We can also envision a ship the size of [a modern armored ship] playing a cruiser role, managing the air defense of an entire battlegroup. This would involve integrating information received from a host of different sensors. Indeed, [a modern armored ship] might be the ideal platform for managing the Navy's "distributed lethality" concept.

—[*What A 21st Century Battleship Could Look Like*](#), by Dr. Robert Farley, author of the *Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky



tethered quad-copter for Dreadnought 2050 project

© Startpoint 2015

The *Gerald R. Ford*-class carriers have an AN/SPY-3 X Band multifunction radar and an AN/SPY-4 S Band volume search radar. Designated together as Dual Band Radar (DBR), it combines S-band and X-band radar, initially developed for the *Zumwalt*-class destroyers. Starting John F. Kennedy (CVN-79) the AN/SPY-6 will replace the AN/SPY-4 as the volume search component of the system.

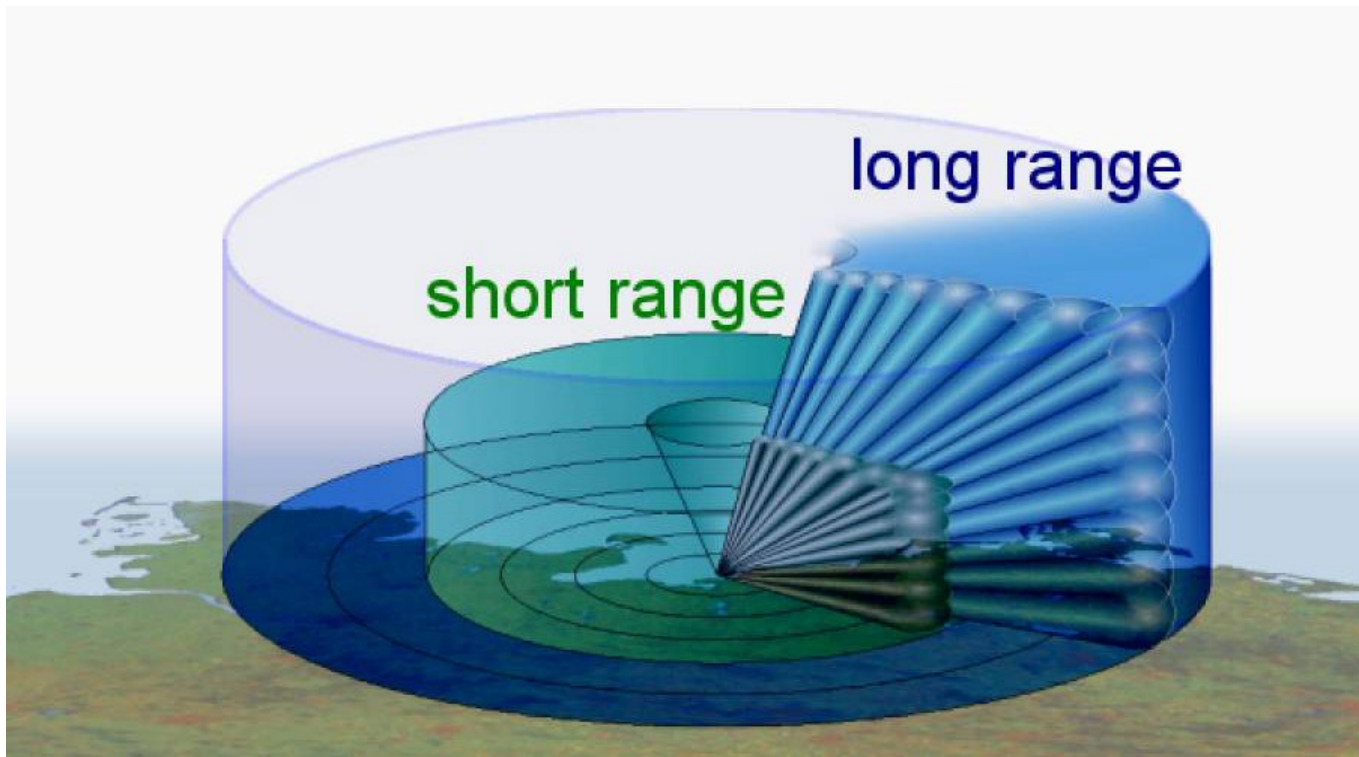


Diagramm eines typischen 3D-Radargerätes, eine Kombination von schneller elektronischer Schwenkung eines Pencil- Beams und mechanischer

Drehung 07.10.2005

Diagram of AN/SPY-3 vertical electronic pencil beam radar conex projections

drawing by Christian Wolff, licensed under [Creative Commons Attribution-Share Alike 3.0 Unported](#)

Another addition to the *Gerald R. Ford*-class is an integrated active electronically scanned array search and tracking radar system. The dual-band radar (DBR) was being developed for both the *Zumwalt*-class guided missile destroyers and the *Gerald R. Ford*-class aircraft carriers by Raytheon. The island can be kept smaller by replacing six to ten radar antennas with a single six-faced radar. The DBR works by combining the X band AN/SPY-3 multifunction radar with the S band Volume Search Radar (VSR) emitters, distributed into three phased arrays. The S-band radar was later deleted from the Zumwalt destroyers to save money.

The three faces dedicated to the X-band radar handle low-altitude tracking and radar illumination, while the three S-band faces handle target search and tracking regardless of weather. “Operating simultaneously over two electromagnetic frequency ranges, the DBR marks the first time this functionality has been achieved using two frequencies coordinated by a single resource manager.”

This new system has no moving parts, therefore minimizing maintenance and manning requirements for operation. The AN/SPY-3 consists of three active arrays and the Receiver/Exciter (REX) cabinets abovedecks and the Signal and Data Processor (SDP) subsystem below-decks. The VSR has a similar architecture, with the beamforming and narrowband down-conversion functionality occurring in two additional cabinets per array. A central controller (the resource manager) resides in the Data Processor (DP). The DBR is the first

radar system that uses a central controller and two active-array radars operating at different frequencies. The DBR gets its power from the Common Array Power System (CAPS), which comprises Power Conversion Units (PCUs) and Power Distribution Units (PDUs). The DBR is cooled via a closed-loop cooling system called the Common Array Cooling System (CACS).

The Enterprise Air Surveillance Radar (EASR) is a new design surveillance radar that is to be installed in the second *Gerald R. Ford*-class aircraft carrier, *John F. Kennedy* (CVN-79), in lieu of the Dual Band radar. The *America*-class amphibious assault ships starting with LHA-8 and the planned LX(R) will also have this radar. The EASR suite's initial per-unit cost will be about \$180 million less than the DBR, for which the estimate is about \$500 million.

Instead of a mast the British Dreadnought T2050 would have a tethered quad-copter. “This tether would be made of carbon nanotubes and cryogenically cooled in order to transmit significant power to the quad-copter for multi-spectral sensors and act as a high-power (i.e. laser) weapon to knock down enemy missiles or aircraft,” according to Startpoint.



Dreadnought 2050 project

© Startpoint 2015



Dreadnought 2050 project

© Startpoint 2015

advanced sensors

naval guns

naval guns

The three major trade-offs in a battleship are: armor, speed, and guns.

Battleships were traditionally intended for fighting against each other in battle lines of ships (hence the name “battleship”).

➤ From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

A battleship must have the capability to kill other ships. If it can't do this, then it isn't a battleship; it's a monitor, or “arsenal ship.” This means that any modern battleship needs an array of sensors necessary to detect enemy ships, as well as guns and missiles capable of sinking them.

Classic battleships were evaluated primarily by the size of their guns. The earliest dreadnoughts carried 305mm guns, while the final specimens of the type carried 406mm or 446mm weapons. Battleships needed these guns to punch through the armor of enemy battleships, and wreak destruction on the vulnerable innards of their counterparts. This is no longer a priority in naval architecture; everyone expects ship-to-ship combat to happen at ranges longer than heavy guns can reach.



The USS Iowa fires a full broadside

U.S. Navy

The Advanced Gun System of the *Zumwalt*-class destroyer comes much closer to what we would want in a battleship. A 155mm gun, the AGM can launch a projectile capable of accurately hitting targets nearly seventy miles away. The Navy has cancelled procurement of the projectile because it's too expensive, but for the purposes of this exercise we can assume at least two AGMs, which can each fire ten shells per minutes.

Secondary guns countered the threat of torpedo boats and small destroyers.

—[*What A 21st Century Battleship Could Look Like*](#), by Dr. Robert Farley, author of the *Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

large naval guns

The *Iowa*'s 16-inch guns could hit targets a little more than 24 miles away in World War II. The smaller *Zumwalt*'s shells can hit targets up to 83 miles away with GPS-guidance. Ranges of more than 200 miles would be possible for 16-inch, 18.1-inch, or 20-inch naval guns using modern shells. That is far enough away for the proposed armored ships to strike at Chinese anti-ship hypersonic missile batteries from well outside of the South China Sea.

rail guns

rail guns

The British Dreadnought T2050: “There would be an electro-magnetic railgun at the bow, capable of firing projectiles the same distance as today’s long-range cruise missiles,” according to Startpoint.

➤ From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

A rail gun uses electro-magnetic force to launch a solid projectile at extremely high speed and with great destructive force. The Navy would like a railgun to deliver projectiles at up to 200 miles from the launcher, with a circular error probability of five meters. Like the AGM, the rail gun could fire 6-10 times per minute, and unlike the AGM the projectiles would be inexpensive and easy to store. Considerable technical challenges remain, but a ship the size of [a modern armored ship], with high energy production capacity, is a great bet to act as a platform for at least one rail gun.

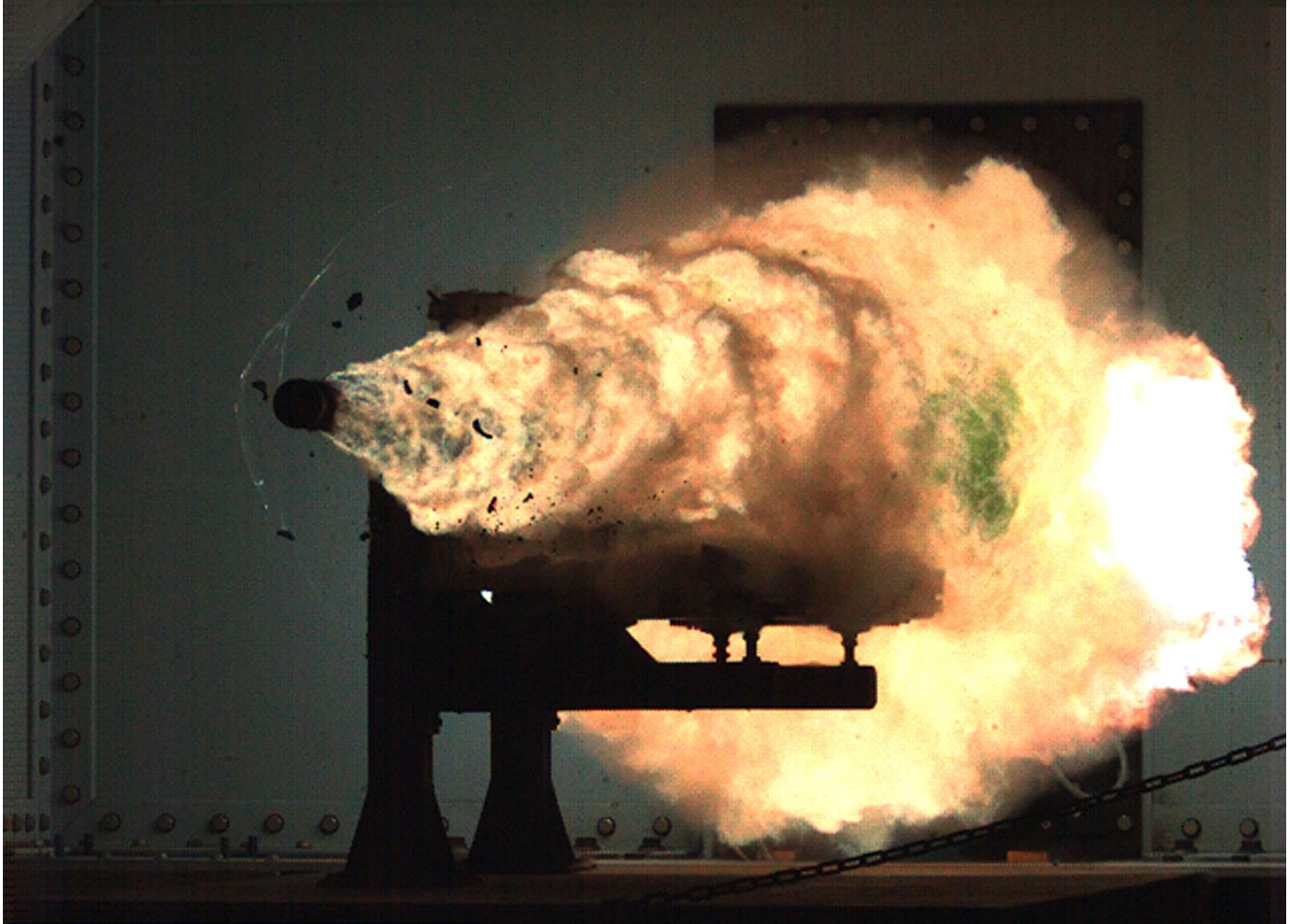
Dr. Robert Farley recommends “two railguns, capable of launching tungsten rods at targets 200 miles away, with the ability to wreak utter destruction based on kinetic energy alone.”

—[What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at

the University of Kentucky

The formula for a railgun:

$$\mathbf{F} = I \int_r^{d-r} d\ell \times \frac{\mu_0 I}{4\pi} \left(\frac{1}{s} + \frac{1}{d-s} \right) \hat{z} = \frac{\mu_0 I^2}{2\pi} \ln \left(\frac{d-r}{r} \right) \hat{x}$$



Photograph taken from a high-speed video camera during a record-setting firing of an electromagnetic railgun (EMRG) at Naval Surface Warfare Center, Dahlgren, Va., on January 31, 2008, firing a 3.2 kg projectile at 10.64MJ (megajoules) with a muzzle velocity of 2520 meters per second. The Office of Naval Research's EMRG program is part of the Department of the Navy's Science and Technology investments, focused on developing new technologies to support Navy and Marine Corps war fighting needs. This photograph is a frame taken from a high-speed video camera. U.S. Navy

Photograph (Released)

U.S. Navy

missiles

missiles

► From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

“

A battleship must have the capability to kill other ships. If it can't do this, then it isn't a battleship; it's a monitor, or "arsenal ship." This means that any modern battleship needs an array of sensors necessary to detect enemy ships, as well as guns and missiles capable of sinking them.



A topside view of the forward MK-41 Vertical Launching System (VLS) aboard the guided missile cruiser USS San Jacinto

U.S. Navy

Any vision of a future battleship includes a great number of missiles. Most large modern surface warships include vertical launch systems, which allow them to carry a variety of missiles for a bunch of different contingencies. The 512 VLS cells proposed for the arsenal ship are a good starting assumption; they would give our battleship long-range hitting power that could far exceed the *Kirovs* or the *Iowas*, while also providing an effective air defense and ballistic missile defense battery.



A BGM-109 Tomahawk cruise missile is launched from the U.S. Navy destroyer USS Sterett

U.S. Department of Defense

The VLS system is extremely flexible; our battleships could carry different missile loadouts depending on the threat environment. Action in a permissive environment (blasting a small country that can't shoot back) would require a heavy emphasis on land-attack missiles. In a less permissive environment, the battleship would load up on anti-aircraft missiles in order to defeat incoming threats. In a classic fleet engagement, a mixed load of SAMs and anti-ship missiles would make [a modern armored ship] a formidable opponent.

The specific kinds of missiles will vary over the lifetime of the battleship. Right now, Tomahawks for land and naval attack, Evolved Sea Sparrows (four of which can fit in each VLS cell) for close air defense, and Standard missiles for naval attack, long range air defense, and ballistic missile defense would fill the VLS cells, depending on the nature of the mission. And the great thing about the VLS system is that as the missiles improve (through the introduction of the Long Range Stand Off (LRSO) missile, for example), the killing potential of the ship also improves.

[A modern armored ship] could carry an arsenal in excess of five “normal” *Arleigh Burke*-class destroyers. With the proper sensors, [a modern armored ship] could defend herself with only a minimal escort, probably pairing with a nuclear attack submarine to provide a formidable offensive or defensive unit.

—[*What A 21st Century Battleship Could Look Like*](#), by Dr. Robert Farley, author of the *Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

The *Gerald R. Ford*-class carriers have the updated RIM-162 Evolved Sea Sparrow missile.



A U.S. Navy RIM-162 Evolved Sea Sparrow Missile.

U.S. Navy

The British Dreadnought T2050 would be equipped with “missile tubes for defensive hypersonic (i.e. Mach 5 plus) missiles,” according to Startpoint.

torpedoes

torpedoes

A supercavitating torpedo is a torpedo using the effect of supercavitation to create a bubble around the torpedo to move at high velocity under water.

The Russians developed the VA-111 Shkval in the 1960s and they went into service in 1977. They are capable of speeds of around 200 knots (370 km/h or 230 mph). These torpedoes are used by the Russian, Iranian, and Vietnamese navies.

Iran has developed the Hoot and Germany has developed the Superkavitierender Unterwasserlaufkörper (Supercavitating underwater-travelling munition) Barracuda.

The United States is working on an unnamed prototype.

The British Dreadnought T2050 “in the armas (the outrigger hulls) would be torpedo tubes to fire super-cavitating torpedoes capable of 300+ knots,” according to Startpoint.

defensive weapons

defensive weapons

“After the invention of the airplane, battleships carried increasingly heavy anti-aircraft armaments, in order to protect both themselves and any accompanying ships. Consequently, a battleship cannot rely on other ships to protect it; it must be able to defeat incoming threats in some fashion in order to deserve the name. Our [armored ship] needs anti-aircraft, anti-missile, and anti-submarine defenses.” —[What A 21st Century Battleship Could Look Like](#) by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

An integrated warfare system, the Ship Self-Defense System (SSDS), has been developed to allow the *Gerald R. Ford*-class carriers to more easily take on new missions.

Future defense systems, such as free-electron laser directed-energy weapons, electric armor, and tracking systems will require more power. ‘Only half of the electrical power-generation capability on CVN-78 is needed to run currently planned systems, including EMALS. CVN-78 will thus have the power reserves that the *Nimitz*-class lacks to run lasers and electric armor.’ The addition of new technologies, power systems, design layout, and better control systems results in an increased sortie rate of 25% over the *Nimitz*-class and a 25% reduction in manpower required to operate.

The Navy is developing a free-electron laser (FEL) to defend against cruise missiles and small-boat swarms.

The British Dreadnought T2050 would be equipped with “missile tubes for defensive hypersonic (i.e. Mach 5 plus) missiles [and] directed energy weapons to stop small enemy craft loaded with explosives,” according to Startpoint.

lasers

lasers



USS Ponce (ASB(I) 15) conducts an operational demonstration of the Office of Naval Research (ONR)-sponsored Laser Weapon System (LaWS) while deployed to the Arabian Gulf

U.S. Navy photo by John F. Williams

“A laser serves primarily as a defensive weapon, targeting incoming cruise and ballistic missiles before they can strike the ship. The laser heats the incoming missile until it cracks or melts, leading to a premature detonation. The laser avoids many of the problems associated with hitting a bullet with a bullet, and eliminates the need for devoting magazine space to defensive weapons. The laser can also target the drones and other reconnaissance vehicles that make up the enemy “kill chain;” the system of systems necessary to effectively target a ship. The Navy is on the cusp of testing a 150kw laser; it has already successfully incorporated a smaller laser on USS

Ponce (LPD-15), although it remains experimental.” — [What A 21st Century Battleship Could Look Like](#) by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky



Navy laser successfully shoots down an unmanned drone during an on-board test of a laser prototype. 12 January 2014

U.S. Navy

laser weapons

microwave weapons

microwave weapons

High-Power Microwave (HPM) weapons are designed to disrupt or destroy the electronics inside various enemy assets, including drones, small boats, and missiles. While lasers are considered point weapons, HPMs can cover a wide area and destroy targets.

The United States Navy's Naval Surface Warfare Center, Dahlgren Division, (NSWCDD) announced a new division HPM Weapon Systems Division headed by Kevin Cogley on 5 January 2022. The division will work on high-power microwave weapons.

"HPM and lasers work in parallel in a lot of areas," Cogley said. "One thing that is unique in the HPM arena is that we can have graduated effects. In HPM, we can have a range of effects on target – from basically jamming a device to physically destroying electrical systems. HPM is very different than many other weapon systems because in many cases you may not see any outward physical effects during an engagement but will see nearly-instant results on the target's operational performance. Using HPM, we can give our Sailors a capability that could be a desirable alternative to firing a kinetic weapon."

The British Dreadnought T2050 would be equipped with "directed energy weapons to stop small enemy craft loaded with explosives," according to Startpoint.

floodable dock area

floodable dock area

In modern amphibious warfare usage, a well dock or well deck, officially termed a wet well during U.S. Navy instruction when the well deck is flooded for operations, is a hangar-like deck located at the waterline in the stern of some amphibious warfare ships. By taking on water the ship can lower its stern, flooding the well deck and allowing boats, amphibious vehicles, and landing craft to dock within the ship.



floodable dock area for Dreadnought 2050 project

© Startpoint 2015

The British Dreadnought T2050: “at the stern there would be a ‘moon pool’ or floodable dock area to deploy Royal Marines and other troops on amphibious raiding missions, or unmanned underwater vehicles (UUVs) to detect mines,” according to Startpoint.

flight deck

flight deck

The flight deck and aircraft carrying capacity for the proposed armored ship is projected to be about the same as that of a modern super carrier with substantial additional space to be used for other purposes.

The number of aircraft on a modern supercarrier would put a single ship well into the top third of all air forces in the world. Even half that number would be a bigger air force than more than half the nations of the world.

If well chosen, the air capacity of a proposed armored ship would be more than enough for most likely missions. The proposed primary peacetime use for disaster response would change the makeup of the air capacity, with a large shift towards more helicopters.

An emphasis on helicopters would match very well with a proposed primary mission of emergency response and provide the ability to quickly move personnel, equipment, and supplies into a disaster zone and evacuate injured civilians to the ship's hospital facilities.

An emphasis on support for marine amphibious or army airborne operations can be filled with a much smaller number of well chosen combat aircraft than for a super carrier.

history

The HMS *Furious* was supposed to be a large light cruiser, armed with two single 18-inch guns fore and aft. Instead the *Furious* was completed in 1917 with a single 18-inch gun aft and a flying deck fore. After a few months the aft gun was replaced with another flying deck.

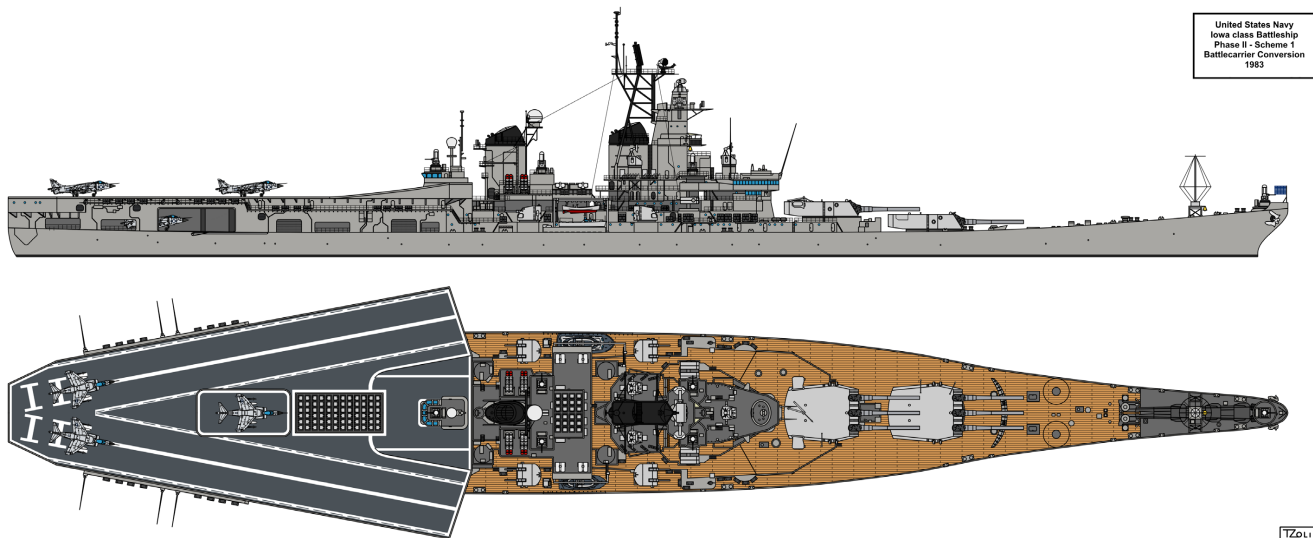
The Japanese *Ise* and *Hyuga* battleships were converted into hybrid battleship/carriers after the Battle of Midway. Because of a lack of sufficient aircraft, they were never equipped with planes. The Japanese built two *Tone*-class heavy seaplane cruisers with 8 inch guns and seaplane facilities. The *Mogami* heavy seaplane cruiser was rebuilt with a seaplane flight deck over the

after third of the ship following damage sustained in the Battle of Midway.

In 1961 the U.S. Navy proposed converting the *Iowa*-class battleships by removing the aft 16-inch turret and replacing it with a hanger for 30 helicopters (20 in the hanger and 10 on deck), 14 LCM-6 landing craft, and bunking for 1,800 Marines.

In 1979 the U.S. Navy reactivated the *Iowa*-class battleships with a proposed two-phase program. Phase I brought the battleships back into service quickly with a minimum of new modifications. The four ships rejoined the fleet.

Phase II, which was never done, called for removing the aft turret and replacing it with a hanger and flight deck. The hanger would hold 12 AV-8B Harrier STOVL jumpjets. The flight deck would be V-shaped with two ski jumps on either side of the main superstructure. The flight decks would be 330 feet long by 150 feet wide. The space in between would be filled with missile launchers. The plans for these battlecruisers were dropped in 1984.



Iowa Phase II Battlecruiser Conversion

[by Tzoli 2015](#)

The 1970s *Kiev*-class heavy aircraft cruiser was a combination of both a cruiser and an aircraft carrier. Unlike the Phase II *Iowa* proposal, the *Kievs* had a full-size flight deck.

The weaponry of the *Kiev*-class heavy aircraft cruiser was comparable to the largest cruisers of the time, equipped with heavy surface-to-air and surface-to-surface missiles and could operate in anti-aircraft, anti-submarine, and surface warfare.



Soviet *Kiev*-class aircraft carrier (CVHG) Novorossiysk

photo by US Navy 25 March 1986

Carrier System Options

These are from the plans for a possible new aircraft carrier to replace the *Nimitz*-class carriers. Congress eventually chose the first option, the least expensive. That became the *Ford*-class carrier.

► From [Future Aircraft Carrier Technology, Volume 1, Overview \(carrier-21\)](#), Office of Naval Research, 1991:

6

Careful consideration of the carrier design drivers and of the possibilities for resolving the problems they pose points to four basic alternatives for future aircraft carriers and carrier systems, with many possible variations of the four. Obviously, since the carriers considered here will be acquired over a

considerable period of time (40 years), a fleet will be built having more than one ship design, so that the Navy can take continual advantage of advancing technology.

The basic concepts that were examined are enumerated immediately below and then are discussed. Clearly, since one approach has already been recommended earlier in this report, these options have already been evaluated in light of current needs and conditions. The options are presented and discussed, however, (1) to show the range of possibilities that was considered in arriving at the recommendations, (2) to indicate the possibilities that may be of interest and available for some time in the future when world conditions and the needs for naval power will surely change, and (3) to establish the basis for the recommended carrier-oriented R&D program. The options are the following.

1. *An advanced NIMITZ-type ship, within the NIMITZ-size envelope.* Such a ship would be changed to the extent feasible to meet some of the most severe threats and engineering problems foreseen and to capitalize on some of the most important of the technological opportunities in the offing, to the extent permitted by the size of the ship.

2. *A new, large monohull.* This ship would offer more scope for change, including potential growth in size and weight of the aircraft of the carrier air wing to achieve improved range and payload, and changed onboard system characteristics to provide more opportunity to strengthen passive and active defense, and more opportunity to capitalize on some major technological advances such as electric drive and advanced, electrically based weapons, along with the advances possible in the NIMITZ-class ship. Torpedo protection and larger and heavier aircraft would cause this ship to be larger than one in the NIMITZ class. The smallest size might be about 105,000 tons and 100 ft longer than a NIMITZ-class ship, and a much larger one that incorporates all the survivability changes contemplated might reach a displacement of 215,000 tons and 1500 ft length.

3. *A large semisubmersible ship.* Designed to lower signatures and to enhance damage resistance, this ship would have a rectangular flight deck of approximately the dimensions of the NIMITZ flight deck, configured to operate with all aircraft in the hangar decks except when being launched or recovered. It would be ballasted to run with the propellers on the submarine-like hulls at about a 125-ft depth that would be able to reduce ballast to draw about 40 ft to enter harbors. This ship would displace about 325,000 tons, empty, and about 660,000 tons with ballast and the hulls at running depth.

The above three alternatives would be able to operate a carrier wing of 85 to 90 aircraft, having the multi-capacity mix of today's air wing, under different

conditions of in-hangar or on-flight-deck parking, servicing and operation, self-defense, and offboard support for the different ships.

4. *A carrier of LHA/LHD size of one somewhat larger (e.g., 40,000 to 50,000 tons).* (LHA/LHD is the largest class of amphibious assault ships.) It would be designed to operate an air wing of about 30 STOVL fighter/light attack aircraft in the F/A-18 weight class with supersonic cruise capability, or smaller numbers of aircraft in a mix of the STOVL fighter and high-performance rotorcraft for supporting missions. It would not have catapult and arresting gear. The ship would be planned for use in a complementary air defense and ASW role with the large carriers, in support of amphibious operations, or by itself in less demanding environments. *The value and viability of such a carrier would be contingent on the development of the new aircraft.*

My comment: Note that this option in a larger size combined with armor and the capabilities of a Soviet *Kiev*-class heavy aircraft carrier or the uncompleted *Iowa*-class Phase II Battlecarrier Conversion would make a lot of sense for the proposed new armored ship. Adding these options to the large semisubmersible version would make a much more capable vessel, but also probably push the costs well beyond anything reasonable.

Each of the four alternatives offers various advantages in ship design and operation. Each differs significantly from the others in the opportunities it poses for accomodating to the design drivers and the problems they raise. Each has its own costs, problems, and uncertainties that in the aggregate will pose serious decision problems for Navy force and budget planners. Each would have a different impact on the design of the total carrier system. These factors are reviewed in the following discussion.

ADVANCED NIMITZ-TYPE CARRIER

Typical characteristics and improvements could include, among others:

- Current-type operations, with aircraft stored and maintained, to the extent feasible, on the flight deck. It could accomodate aircraft of the size that had been planned for the A-12; however, potential growth of ATS aircraft or other follow-ons to the aircraft now performing the ATS missions in order to achieve greater range and payload performance and more advanced, countersteapth sensors would lead to a very tight fit. This could enforce more reliance on offboard surveillance and targeting assets.
- Modern, late-cavitating propellers, steps to quiet machinery, and steps

to reduce RCS and IR signatures to the extent feasible within the basic design.

- Planar array, electronically scanned radars (as described in the discussion of ship survivability and defense, Chapter 7), replacing the current radars, and LPI/LPD communication systems with low-observable planar array antennas. These changes, together with other signature management steps, would require complete redesign of the island, and so would constitute a major change in the ship configuration.
- Enhanced self-defense, including advanced missiles of SPARROW size in appropriately designed VLS bays, and active torpedo defense—all to the extent permitted by weight and space constraints.
- **Selective application of upgraded armor.**
- Enhanced damage control, including widespread instrumentation, computerized damage diagnostics, more fire and smoke retardant materials, and automation where it can be effective in helping the crew with damage control.
- Extensive internal redesign to improve ship and aircraft operational and maintenance efficiency and reduce crew size.
- Possibly, significantly greater torpedo protection, or aviation fuel and magazine capacity, if the maximum volume that might be gained through personnel savings were used for one of those purposes.
- For the late mid-term and long-term designs, advanced reactors if these prove to be preferable, and advanced power transmission and management systems, associated with electric catapults and arresting gear and possibly with advanced defensive systems.

The extensive changes would greatly improve the efficiency and effectiveness of the carrier. It would still fit in the existing drydock and port facilities. However, it would still also include some major vulnerabilities. Among them would be continued, relative ease of targeting by threat systems, although the reductions in signature would ease the demands on EW protection and on use of cover and deception such as decoying. Major vulnerability to underkeel torpedos that might penetrate the active torpedo defense would remain, unless enough volume for added underkeel torpedo protection could be recovered and used through the other changes noted in ship design.

The least-cost option among those available with the offensive strike capability and the defensive air power of a NIMITZ-class carrier would be simply to purchase NIMITZ-class follow-on ships indefinitely. This would carry many of the survivability problems of the NIMITZ into the indefinite future, and it would deny to the ship and the carrier system the benefits of advancing technology, while potential threats would probably continue to improve as described earlier.

The improvements outlined above could add initial cost of up to about 10 to 15 percent of this option, although they would save in downstream costs throughout the ship's service life. Such improvements would enable the ship to keep up in some significant degree with changes in the future operating environment.

NEW LARGE MONOHULL

This option could include all the improvements outlined above for an advanced NIMITZ-class design, with the opportunity for further improvement in several directions:

- Addition of from 100 ft to about 400 ft to the flight deck, enabling the ship to operate the largest aircraft currently being contemplated (up to 125,000 lb TOGW). The addition of 100 ft to a NIMITZ-class ship would entail growth in other dimensions if one wanted to retain the same prismatic factor, which is very favorable for hydrodynamic design and ship speed. If a small (one knot or less) reduction in speed is acceptable, "stretching" the NIMITZ hull by, say, 125 ft, would allow changes in the magazine to provide some measure of passive protection against underkeel torpedoes and would also accommodate the heavier aircraft in the offing. A ship at the other extreme (i.e., 400 ft) would grow significantly in all dimensions—the overall beam would be about 300 to 350 ft and the draft would be nearly 50 ft if underkeel torpedo protection were provided with a rigid bottom.
- Addition of underkeel torpedo protection. This would be built into the basic structure of the ship, at least in part, and might be augmented by compliant bottom protection if necessary to absorb the energy of a large torpedo explosion. In the latter case the ship would draw up to 60 ft while at sea, but it might be feasible to reduce this to about 40 ft by pumping ballast out of a flexible collapsible bottom prior to entering harbors. (The "stretched NIMITZ" alone would not draw more water.)
- Greater opportunity for signature reduction accompanying the hull redesign, thereby increasing the difficulty of targeting the ship and increasing the opportunity for effective cover and deception by electronic countermeasures (ECM), chaff, and decoying.
- Opportunity for much more hangar deck space resulting from added ship size and perhaps from personnel efficiency gains, so that the ship could operate with an 80+ percent-sized air wing with no parking, turnaround, or maintenance activity on the flight deck *or* for sharing the volume gains with other alternative improvements noted immediately below.

Much enhanced self-defense relative to what could be accomplished within the NIMITZ-class envelope.

- Significantly increased fuel and magazine volume to increase sustainability in combat, depending on the actual ship size and on whether volume saved from other applications were used for these purposes.
- Opportunity for podded electric drive, when available.

These additional gains in capability above those of the improved NIMITZ would require a ship that might vary from about 125,000 tons to about 215,000 tons. Home harbors might have to be dredged to handle the ship, especially in a rigid bottom configuration. The hull designs contemplated would mean that the ship could not use available drydock facilities. The additional cost of the ship alone would be 10 to 100 percent greater than that of a NIMITZ, depending on the size and the extent of the changes incorporated. The cost of new port facilities for the new ship class would have to be borne; this might come to about \$2.5 billion to \$3 billion for facilities on both coasts (less for the “stretched NIMITZ” since a graving dock exists in which such a ship could be built). If the cost of new drydocks for ship repair were to be saved, other means for working around the facilities problem (discussed below) would have to be adopted, at some unknown cost.

LARGE SUBMERSIBLE

The attraction of this ship is that it could offer the lowest detectability against targeting and, depending on the resolution of some structural unknowns, possibly the greatest structural integrity against major damage. (It could probably still be targeted from outside visual range, however). The ship would be about 1100 ft long and would have a beam of 250 ft for the rectangular flight deck. If the ship were a SWATH [small-waterplane-area twin hull], the underwater beam would be larger because of the overhang of the 125-ft diameter hulls from the profile of the pylons (a “golf-club” configuration could be used to stay within the overall beam, but this would not be as stable or as efficient hydrodynamically). The ship would draw about 185 ft while under ballast at sea with the propellers at a depth of 125 ft, but it might be designed to draw as little as 40 ft without ballast, to enter port. (Its height might then interfere with bridges in some ports.) The ship would displace about 325,000 tons empty and about 660,000 tons in ballasted configuration. The reactors and magazines would be in the hulls, where they would be less accessible to attack from airborne weapons, and hangar deck space would permit the full air wing to be housed, turned around, and maintained inside the ship, with advantages in signature reduction and controlled conditions for the crew in severe weather. It would use submarine technology for quieting, and double- or triple-hull

submarine-type construction for damage resistance. Its speed would not be as great as that of the NIMITZ (25 knots vice 30+ knots, with four times as much installed power). However, speed would affect only deployment time; wind-over-deck requirements could be reduced significantly by use of a skijump, and deck parking space would not be needed.

This ship would be large enough to accomodate operations by the largest aircraft being contemplated, especially with a skijump and catapults for takeoff and longer runouts for the arresting gear, without extensive wind-over-deck requirements. The rectangular deck would have ample space for added self-defense that the passive/active defense trade-offs might suggest for a ship of its potentially low detectability. There could also be space and weight capacity for a significant number of offensive long-range missiles for defense suppression to support strike warfare. The rectangular flight deck, potentially configured as two parallel runways, would offer great flexibility for simultaneous launch and recovery operations.

All of the other improvements for efficiency and effectiveness have been sketched above for the large monohulls would be available to this ship. Total redesign of the use of space on board would clearly be required, however. The ship would also need new building and port facilities. A mode for working on the ship in water and at dockside once it is in service, without the usual drydock facilities, could be devised to minimize the new fixed facilities that would have to be built.

A rough estimate of cost for this ship, based on a synthesis of submarine costs for the hulls and monohull carrier costs for the superstructure, leads to an estimate of about three times the cost of a NIMITZ-class carrier. However, a ship of this kind represents a very long extrapolation from current experience with semisubmersibles—currently, 3,500 tons in operation and 5000 tons in design. Experience suggests that many “unknown unknowns” would be encountered in the course of design, construction, and operation, so that an increase to a factor of four times the NIMITZ class cost might be an outer limit.

The benefit gained for the added cost would be the potentially great increases in survivability and firepower. These increases in carrier capability could offset the carrier costs by avoiding the costs of other battle force combatants that might not be needed to protect the ship. These trade-offs would have to be explored in depth through R&D, model tests, and design studies, including analyses and simulation of the entire battle group in high-intensity operations.

LHA/LHD-SIZED CARRIER

The flexibility advantages and mission opportunities of this carrier in complementing the force of large carriers were noted above, in connection with the technological attraction of powered lift aircraft. Considered *ab initio*, this ship can be a monohull or semisubmersible. The alternatives are considered to be in the same class because of their size, the needed companion design of a powered lift air complement, and other attributes such as the need for heavy reliance on offboard protection and information sources for their combat operations.

The semisubmersible would offer sea-keeping in heavy seas about as good as that of the NIMITZ-class carrier, extending its operational capability into more severe weather conditions—a major concern with respect to small carriers. It would also offer improved survivability features for the same reasons that the large semisubmersible would, but not to the same extent. However, calculations show that for the same flight deck size—by as much as a factor of two. All of the unknowns and uncertainties of the larger semisubmersible design would apply to this one as well, since the needed extrapolation from actual experience would still be large. Thus, further review of the smaller-carrier option has centered on the monohull design.

Passive torpedo protection for this class of ship would be infeasible against torpedoes that can seriously threaten a NIMITZ-class carrier, although some protection against smaller torpedoes would be feasible. Many of the other opportunities for improving ship survivability, such as the more liberal use of armor and instrumenting the ship to enable more responsive maintenance and damage control, would be applicable to this class of ship, as would many of the weapon technology advances described above.

All of the opportunities for improving the efficiency and operability of the carrier and its air wing would also be available for this ship, but the application might have to be more measured because of the ship's smaller size. Less volume for the magazine and aviation fuel would increase the need for more frequent replenishment. There would be insufficient space to perform intermediate maintenance aboard this ship. Some of the improvements, such as electric drive, could be available sooner, based on the lesser extrapolation that would be needed from battle force combatants' electric drive currently in development.

A monohull ship of this size would not stress the available facilities. The cost of the ship would be less than the cost of the larger ships described above, since for ships of similar design costs vary roughly according to weight, but the cost would be larger per ton because many design efficiencies available to larger ships would have to be foregone. A rough estimate analogous to the others made (and based in part on the studies performed during the CVN-CVV

discussions of the late 1970s) suggests that a 50,000-ton carrier might cost about 55 to 65 percent as much as a NIMITZ-class (95,000-ton) ship.

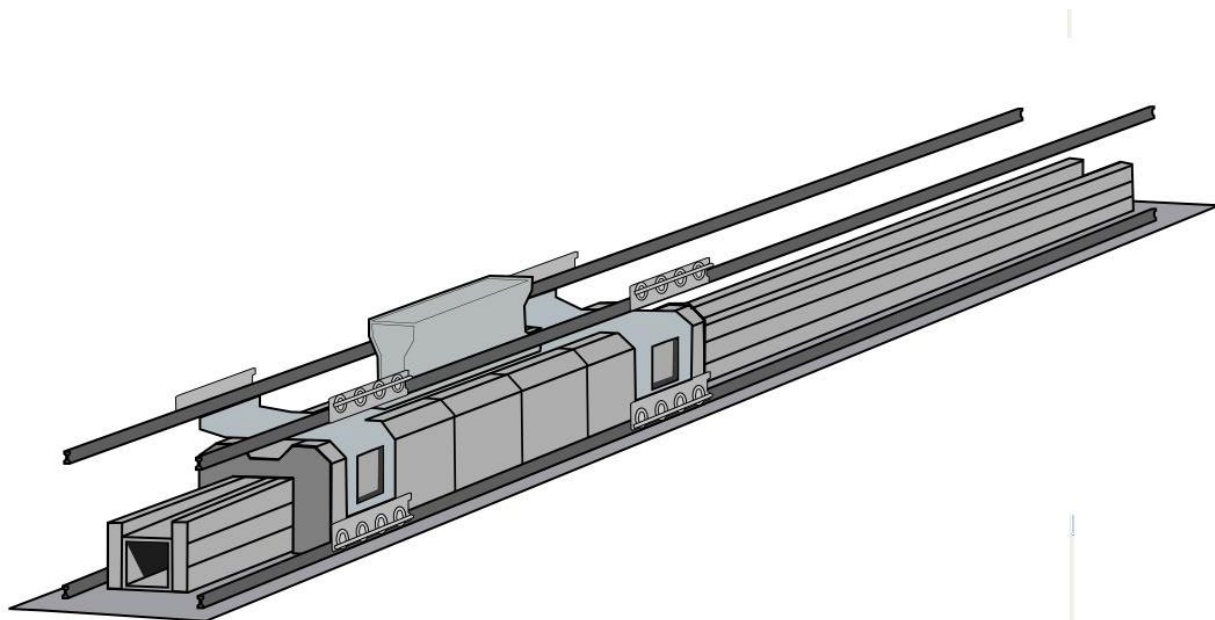
—[Future Aircraft Carrier Technology, Volume I, Overview \(carrier-21\)](#), Office of Naval Research, 1991

The rest of the discussion is skipped here, but I do intend to come back and add it — unfortunately the only copy of this document I could find was a scan of the original and every letter has to be hand retyped.

current

The *Gerald R. Ford*-class carriers have advanced arresting gear. Technological advances in electromagnetics have led to the development of an Electromagnetic Aircraft Launch System (EMALS) and an Advanced Arresting Gear (AAG).

The *Gerald R. Ford*-class carriers have an Electromagnetic Aircraft Launch System (EMALS) in place of traditional steam catapults for launching aircraft.



Electromagnetic Aircraft Launch System

drawing by Tosaka, licensed under [Creative Commons Attribution-Share Alike 3.0 Unported](#)

Electromagnets are also being used in the new Advanced Arresting Gear (AAG) system. The current system relies on hydraulics to slow and stop a landing aircraft. While the hydraulic system is effective, as demonstrated by more than fifty years of implementation, the AAG system

offers a number of improvements. The current [needs update] system is unable to capture unmanned aerial vehicles (UAVs) without damaging them due to extreme stresses on the airframe. UAVs do not have the necessary mass to drive the large hydraulic piston used to trap heavier, manned airplanes. By using electromagnetics the energy absorption is controlled by a turbo-electric engine. This makes the trap smoother and reduces shock on airframes. Even though the system will look the same from the flight deck as its predecessor, it will be more flexible, safe, and reliable, and will require less maintenance and manning.

The movement of weapons from storage and assembly to the aircraft on the *Gerald R. Ford*-class carrier flight deck has also been streamlined and accelerated. Ordnance will be lifted to the centralized rearming location via higher-capacity weapons elevators that use linear motors. These elevators are located so that ordnance need not cross any areas of aircraft movement, thereby reducing traffic problems in the hangars and on the flight deck. In 2008, Rear Admiral Dennis M. Dwyer said these changes will make it hypothetically possible to rearm the airplanes in “minutes instead of hours”.

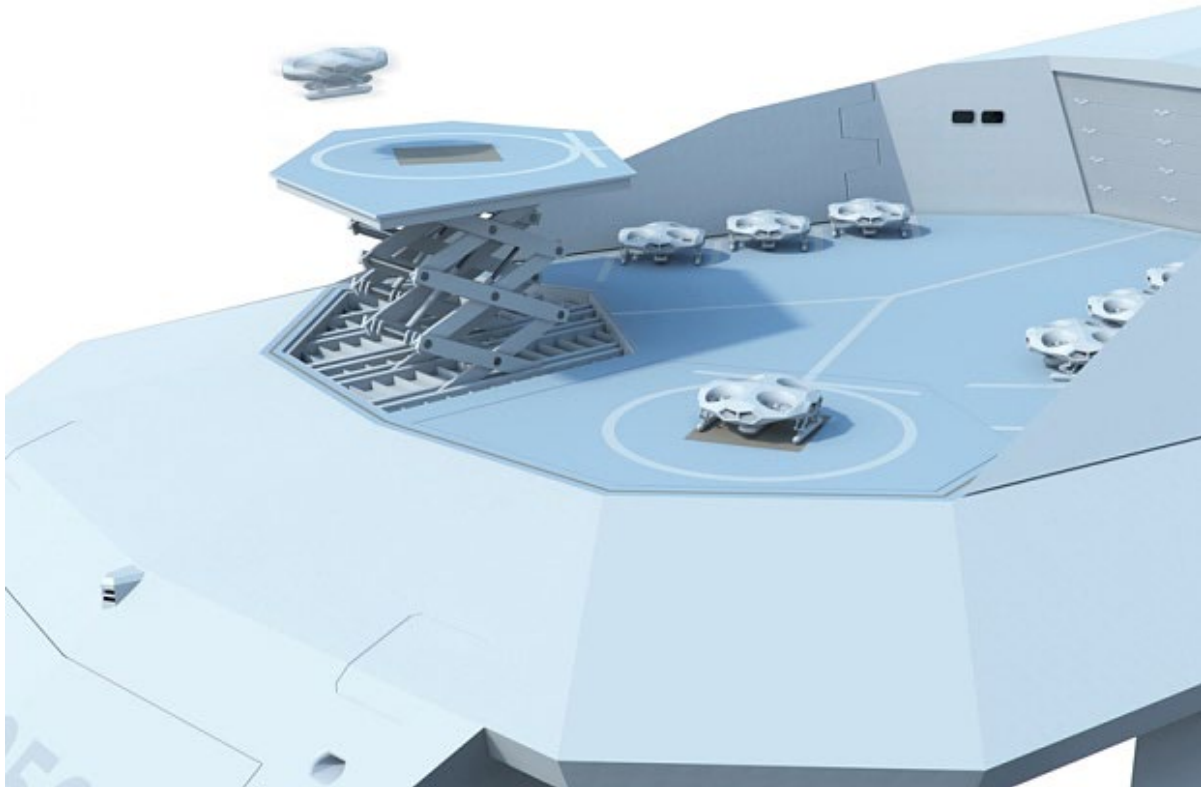
future

The British Dreadnought T2050: “Above the floodable dock would be a large, extendable flight deck and hangar for multiple remotely piloted air systems (RPAS/UAVs), many equipped with weapons, which could target the enemy without putting the crew in harm’s way,” according to Startpoint.



Dreadnought 2050 project

© Startpoint 2015



Dreadnought 2050 project

© Startpoint 2015

hangar deck

hangar deck

A hangar deck is a deck on an aircraft carrier that is below the flight deck used as a hangar.

A typical carrier air wing can include 24-36 F/A-18E or F Super Hornets as strike fighters; two squadrons of 10-12 F/A-18C Hornets, with one of these often provided by the U.S. Marine Corps (VMFA), also as strike fighters; 4-6 EA-18G Growlers for electronic warfare; 4-6 E-2C or D Hawkeyes for airborne early warning (AEW), C-2 Greyhounds used for logistics (to be replaced by MV-22 Ospreys); and a Helicopter Antisubmarine Squadron of 6-8 SH-60F and HH-60H Seahawks. Aircraft that have previously operated from *Nimitz*-class carriers include F-4 Phantoms, RA-5C Vigilantes, RF-8G Crusaders, F-14 Tomcats, S-3 Vikings, EA-3B Skywarriors, EA-6B Prowlers, A-7 Corsair II and A-6E Intruder aircraft.

The *Gerald R. Ford*-class carriers have the ability to carry up to 90 aircraft, including the Boeing F/A-18E/F Super Hornet, Boeing EA-18G Growler, Grumman C-2 Greyhound, Northrop Grumman E-2 Hawkeye, Lockheed Martin F-35C Lightning II, Sikorsky SH-60 Seahawk helicopters, and unmanned combat aerial vehicles.

The *Gerald R. Ford*-class is designed to accommodate the new Joint Strike Fighter carrier variant aircraft (F-35C).

drones

drones



A Boeing ScanEagle drone is launched from the USS Gunston Hall

U.S. Navy

“Like all modern surface ships, [a modern armored ship] would require facilities for helicopters to handle search, transportation, and anti-submarine duties. Increasingly, however, the U.S. Navy has looked into using surface ships as platforms for the deployment of air, surface, and sub-surface drones. With her great size, [a modern armored ship] could act as a mothership for a variety of unmanned vehicles, employing them either as sensors or, in time, as weapons in their own right.” —[What A 21st Century Battleship Could Look Like](#) sby Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

The British Dreadnought T2050: “Above the floodable dock would be a large, extendable flight deck and hangar for multiple remotely piloted air systems (RPAS/UAVs), many equipped with weapons, which could target the enemy without putting the crew in harm’s way,” according to Startpoint.

air, surface, and submarine drones

locally 3-D printed drones

planes

planes

general summary

In order for a carrier to deploy, it must embark one of ten Carrier Air Wings (CVW). The carriers can accommodate a maximum of 130 F/A-18 Hornets or 85-90 aircraft of different types, but current numbers are typically 64 aircraft. Although the air wings are integrated with the operation of the carriers they are deployed to, they are nevertheless regarded as a separate entity. As well as the aircrew, the air wings are also made up of support personnel involved in roles including maintenance, aircraft and ordnance handling and emergency procedures. Each person on the flight deck wears color-coded clothing to make their role easily identifiable.

A typical carrier air wing can include 24-36 F/A-18E or F Super Hornets as strike fighters; two squadrons of 10-12 F/A-18C Hornets, with one of these often provided by the U.S. Marine Corps (VMFA), also as strike fighters; 4-6 EA-18G Growlers for electronic warfare; 4-6 E-2C or D Hawkeyes for airborne early warning (AEW), C-2 Greyhounds used for logistics (to be replaced by MV-22 Ospreys); and a Helicopter Antisubmarine Squadron of 6-8 SH-60F and HH-60H Seahawks. Aircraft that have previously operated from *Nimitz*-class carriers include F-4 Phantoms, RA-5C Vigilantes, RF-8G Crusaders, F-14 Tomcats, S-3 Vikings, EA-3B Skywarriors, EA-6B Prowlers, A-7 Corsair II and A-6E Intruder aircraft.

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The *Gerald R. Ford*-class is designed to accommodate the new Joint Strike Fighter carrier variant aircraft (F-35C).

The *Gerald R. Ford*-class is intended to sustain 160 sorties per day for 30-plus days, with a

surge capability of 270 sorties per day.

drones
propeller planes
jets
helicopters

propeller planes

propeller planes

propeller planes

jets

jets

fighters and other jets

A typical carrier air wing can include 24-36 F/A-18E or F Super Hornets as strike fighters; two squadrons of 10-12 F/A-18C Hornets, with one of these often provided by the U.S. Marine Corps (VMFA), also as strike fighters; 4-6 EA-18G Growlers for electronic warfare; and 4-6 E-2C or D Hawkeyes for airborne early warning (AEW), C-2 Greyhounds used for logistics (to be replaced by MV-22 Ospreys). Aircraft that have previously operated from *Nimitz*-class carriers include F-4 Phantoms, RA-5C Vigilantes, RF-8G Crusaders, F-14 Tomcats, S-3 Vikings, EA-3B Skywarriors, EA-6B Prowlers, A-7 Corsair II and A-6E Intruder aircraft.

helicopters

helicopters

helicopters

A typical carrier air wing can include a Helicopter Antisubmarine Squadron of 6-8 SH-60F and HH-60H Seahawks.

The proposed armored ship would need significant numbers of helicopters for medical evacuations and to move emergency personnel rapidly into areas where local road, rail, and traffic infrastructure might be severely damaged.



US Army helicopter

Image by [Defence-Imagery](#)

airboats

airboats

Airboats (swamp boats) have more civilian uses than military uses.

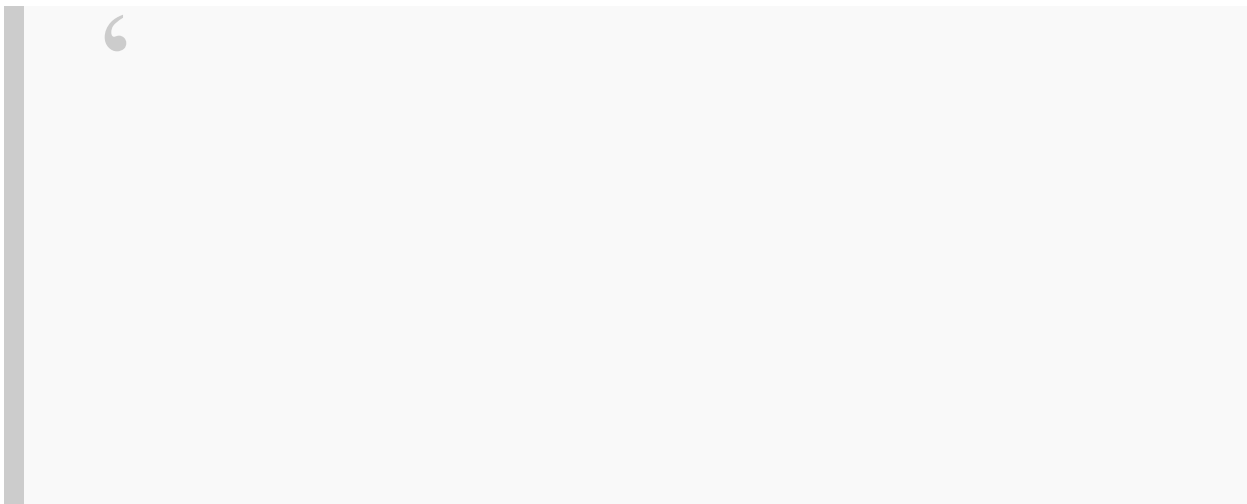
Airboats are particularly useful for rescues and responses to floods, tsunamis, hurricanes, typhoons, and other similar events. Airboats are extremely useful for ice rescues. Airboats have numerous other civilian uses, including scientific research.

Airboats are not appropriate for an amphibious attack, but are useful in certain kinds of coastal waters after an initial amphibious or airborne attack.

Each of the armored ships can launch airboats from a floodable dock area and respond quickly to natural disasters involving severe flooding.

Additionally, each proposed common base near water or ice can have an appropriate sized contingent of airboats for a wide variety of purposes.

➤ From [Airboat](#), by Wikipedia:





Mike Netherland (left) and Donald Morgan of the Army Corps of Engineers collect herbicide-resistant hydrilla from Lake Seminole in northern Florida.

28 July 2005, 16:59

Stephen Ausmus of the United States Department of Agriculture

An airboat (also known as a planeboat, swamp boat, bayou boat, or fanboat) is a flat-bottomed watercraft propelled by an aircraft-type propeller and powered by either an aircraft or automotive engine. They are commonly used for fishing, bowfishing, hunting, and ecotourism.

Airboats are a common means of transportation in marshy and/or shallow areas where a standard inboard or outboard engine with a submerged propeller would be impractical, most notably in the Florida Everglades but also in the Kissimmee and St. Johns rivers, and the Mekong River and Delta, as well as the Louisiana bayous and Mesopotamian Marshes.

The characteristic flat-bottomed design of the airboat, in conjunction with

the fact that there are no operating parts below the waterline, allows for easy navigation through shallow swamps and marshes; in canals, rivers, and lakes; and on ice and frozen lakes. This design also makes it ideal for flood and ice rescue operations.

The airboat is pushed forward by the propeller, which produces a rearward column of air behind it. The resulting prop wash averages 150 miles per hour (241 km/h). Steering is accomplished by diverting that column of air left or right as it passes across the rudders, which the pilot controls via a "stick" located on the operator's left side. Overall steering and control is a function of water current, wind, water depth, and propeller thrust. Airboats are very fast compared to comparably-sized motorboats: commercial airboats generally sail at speeds of around 35 miles per hour (30 kn) and modified airboats can go as fast as 135 miles per hour (117 kn).

Stopping and reversing direction are dependent upon high operator skill, since airboats, like most boats, do not have brakes. They are incapable of traveling in reverse, unless equipped with a reversible propeller.

rescue

In recent years, airboats have proven indispensable for flood, shallow water, and ice rescue operations. As a result, they have grown in popularity for public safety uses.

During the flooding of New Orleans following Hurricane Katrina, August 29, 2005, airboats from across the United States rescued thousands of flood victims. Thirty airboats crewed by civilian volunteers evacuated over 1,100 patients and 4,000 medical personnel and family members from four downtown New Orleans hospitals in less than 36 hours. This "Cajun Navy" morphed into a grassroots volunteer search and rescue organization that has deployed to rescue people during Hurricane Harvey, Hurricane Florence, and other natural disasters.

Numerous articles have been published in fire-rescue trade journals such as *Fire Engineering* and *National Fire and Rescue Magazine* describing the advantages, capabilities, and benefits of using airboats for water rescue operations, and providing in-depth description of actual water rescue incidents, including the flooding of New Orleans.

Airboats are particularly effective at water rescues in shallow, marshy, or icy winter environments. Airboats are partially amphibious and can therefore navigate effectively over obstacles, such as partially submerged buildings and wreckage or sea ice, that would stop a normal boat. In ice rescues, use of airboats cuts the average rescue time from 45 to 60 minutes to seven to 12

minutes, according to data from Minnesota fire departments. They are also faster, larger, safer, and more durable than other small boats used in ice rescues.

Though airboats are highly effective at water and ice rescues, airboats and helicopters do not work well together. Rotor wash from low-flying helicopters can push and even capsize airboats. During post-Katrina rescue operations, a helicopter's rotor wash was reported to have capsized one airboat, and many airboats were blown into the sides of buildings, standing utility poles, and bridge pilings by low-flying helicopters.

military use

Airboats are used by various militaries and border patrols around the world as well as by the U.S. Coast Guard. In addition to the use of airboats by the British Army in the Mesopotamian Campaign of WWI and by the Soviet Union in the Eastern Front of WWII, airboats have been used by the US Army and Iraqi security forces in the Vietnam and Iraq wars, respectively.

During the Vietnam War the Hurricane Aircat airboat was used by U.S. Special Forces and South Vietnamese troops to patrol riverine and marshy areas where larger boats could not go. Two of these airboats were also used by the Khmer National Navy after they were captured from the U.S. Special Forces by the People's Army of Vietnam (PAVN) in September 1967.

Airboats are also used in Texas and Iraq for border patrol. The airboats used in Iraq were supplied by American companies and assembled in Iraq by American civilian contractors, and they are used by both American and Iraqi forces to patrol the Tigris and Euphrates rivers, the marshes of southeastern Iraq, and the Shatt al-Arab waterway, the latter two of which include parts of the Iran-Iraq border. Modern Iraqi military airboats are 18 feet (5.5 m) long, powered by 454 hp engines hooked up to 78-inch (2.0 m) Whirlwind propellers, and armed with M240 crew-served machine guns. The Nov/Dec 2007 issue of *Airboating Magazine* had an article on airboats used in Vietnam and in Iraq and has had numerous articles on airboats used by U.S Coast Guard and other state and county EMS units for rescue of ice fisherman and rescue in floods or after hurricanes. In 2013 the Iraqi Ministry of Oil purchased 20 airboats for use as personnel transport, patrol, and cable laying and light cargo boats in the rivers and marshes of Iraq.

—[Airboat](#), by Wikipedia

food

food

The current limitation on how long a nuclear powered aircraft carrier or submarine can remain deployed at sea is the provisions (especially food and water) that it can carry.

The armored vessel will need substantial amounts of emergency food for distribution in natural disasters. The U.S. government has developed emergency ration packages that meet a wide variety of religious dietary restrictions, provide substantial nutrition, can be stored for years, and can easily be distributed.

Both the ships and the bases need food.

Each base will need to provide meals to those who work on the base. The capacity should be expanded to provide meals for the members of the reservation.

When possible, the food needed for the bases and the armored ships should be grown on reservations. Each Native American and Native Hawai'ian Native National Guard should be directly involved in food production, including construction and maintenance of irrigation, on reservations.

water

water

Modern warships typically have the capacity for producing drinking water from sea water. The largest warships have enough excess capacity to temporarily provide water to a city during a natural disaster or other emergency.

Both the ships and the bases need fresh drinking water and water for other purposes.

waste disposal

waste disposal

Both the ships and the bases need waste disposal.

The first two carriers of the *Ford*-class have run into problems with the plumbing of the waste system. The pipes were too narrow to handle the load of users, resulting in the vacuum failing and repeatedly clogged toilets. The solution was a specialized acidic cleaning solutions have been used to flush out the sewage system. These cleaning treatments cost about \$400,000 each time, resulting in a substantial unplanned increase in the lifetime expense of operating these ships according to the GAO. This is a good example of solving problems during design rather than during construction or even worse after deployment.

Waste management technology will be deployed on *Gerald R. Ford*. Co-developed with the Carderock Division of the Naval Surface Warfare Center, PyroGenesis Canada Inc., was in 2008 awarded the contract to outfit the ship with a Plasma Arc Waste Destruction System (PAWDS). This compact system will treat all combustible solid waste generated on board the ship. After having completed factory acceptance testing in Montreal, the system was scheduled to be shipped to the Huntington Ingalls shipyard in late 2011 for installation on the carrier.

crew accommodations

crew accommodations

The ships need accommodations for the crew.



Shows a typical berthing on *Ford*-class aircraft carriers of three racks per section. 22 February 2013

U.S. Navy

Systems that reduce crew workload have allowed the ship's company on *Gerald R. Ford*-class carriers to total only 2,600 sailors, about 700 fewer than a *Nimitz*-class carrier. The massive, 180-man berthing areas on the *Nimitz*-class are replaced by 40-rack berthing areas on *Gerald R. Ford*-class carriers. The smaller berthings are quieter and the layout requires less foot traffic through other spaces. Typically the racks are stacked three high, with locker space per person. The berthings do not feature modern "sit-up" racks with more headroom; bottom and middle racks

only accommodate a sailor lying down. Each berthing has an associated head, including showers, vacuum-powered septic-system toilets (no urinals since the berthings are built gender-neutral) and sinks to reduce travel and traffic to access those facilities. Wifi-enabled lounges are located across the passageway in separate spaces from the berthing's racks.

health care

health care

Both the ships and the bases need to provide for health care.

As the armored ships are likely to be the largest or second largest ship in a naval group, in addition to providing emergency medical care during a disaster response, the ships will also provide the hospital facilities for the naval group itself.

hospital facilities

missions

missions

It would be absurd for a single class of ship to include everything included in this PDF. Quality ships must have a clear purpose. At some point decisions need to be made about how the ship is designed. I recommend emphasizing the ability to rapidly respond to emergencies of all kinds.

I recommend concentrating on a ship that has the primary goal of rapid response to humanitarian emergencies but also equipped with sufficient military functionality to be of interest to the U.S. military.

humanitarian operations

humanitarian operations

In 1847, the Choctaw nation provided financial assistance to the Irish people during the height of the Irish potato famine, despite their U.S. government enforced poverty and having endured the 1831-1833 Trail of Tears just 15 years earlier. This is commemorated by the *Kindred Spirits* sculpture in Ballick Park, Middleton, County Cork, Ireland.



Built in Midleton, Co Cork, this is a sculpture to remember the aid given by the Choctaw Nation during the Great Famine.

Gavin Sheridan, 18 September 2016, licensed under [Creative Commons Attribution-Share Alike 4.0 International](#)

“When our ancestors heard of the famine and the hardship of the Irish people, they knew it was time to help,” Gary Batton, chief of the Choctaw Nation of Oklahoma, wrote in 2017.

“U.S. Naval forces perform a wide range of humanitarian operations on an almost daily basis. These activities include rescues at sea, transport of emergency personnel and relief supplies, community service (both in the United States and abroad), emergency relief operations, medical services, and so on.” — [A Sampling of U.S. Naval Humanitarian Operations](#)

disaster response

disaster response

The ships of the proposed Native National Guard can deploy quickly to major disasters around the world and provide vital humanitarian services.

Examples of the kinds of possible humanitarian emergencies the proposed ship might respond to include: earthquakes, hurricanes/typhoons, tsunamis, floods, wildfires, volcanic eruptions, droughts, disease outbreaks, tornadoes/cyclones, terrorism/mass violence, industrial explosions, industrial chemical releases, nuclear accidents, railroad accidents, aircraft crashes, and sea rescues.

The ships of the proposed Native National Guard can deploy quickly to major disasters around the world and provide vital humanitarian services.

Large U.S. naval vessels, including aircraft carriers and battleships, have provided rescue personnel, electricity, fresh drinking water, food, medical supplies, and hospital services during major disasters.

This suggests the ship should have medical facilities, carry supplies, provide water, food, and electricity, have aircraft (especially helicopters), and have the ability to do emergency construction.

The ship needs to be able to move to emergency sites quickly. For a surface ship this might imply a catamaran or trimaran hull. A hovercraft or ground effect vehicle would be faster, but

more expensive and complicated. The fastest method of travel (approaching the speed of sound and much faster than commercial aircraft) would be a supercavitating torpedo, but that would be incredibly expensive and complicated and severely limit the carrying capacity of the vessel. Some have expressed excitement about the prospect that a submarine using supercavitation could cross the Pacific Ocean in as little as 100 minutes. That figure is derived from the fact that the fastest a supercavitating bubble can travel underwater is the speed of sound underwater — about 3,600 mph or about 5,800 kph. There have been past proposals for large military vessels that have very shallow submersibility. This reduces cost and complexity and increases carrying capacity and might still allow supercavitation.

➤ From [A Sampling of U.S. Naval Humanitarian Operations](#):

Naval forces are frequently called on to respond to disasters--both natural and man-made. The activities listed below range from relief actions following floods, earthquakes, and storms to ships' crews and Marines aiding efforts to fight forest fires, to the deployment of Navy ships to assist oil clean-up efforts following the *Exxon Valdez* oil spill.

Kansas City, USA, July 1951

“From 12 through 20 July 1951, personnel from the Ninth Naval District assisted **flood** relief work in the Kansas City area.

Greece, 14-19 August 1953

“The Amphibious Task Unit of the Sixth Fleet, with BLT 2/6 (Reinf.) embarked, assisted in relief operations following **earthquakes** in the Ionian Islands.

Haiti, October 1954

“From 13 to 19 October 1954, USS *Saipan* operated off the southern coast of Haiti, extending relief and humanitarian aid to victims of **Hurricane Hazel**. Helicopters from the carrier dropped food, medicine, clothing, and other supplies to the stricken Haitians.

Greece, April 1955

“Following a severe **earthquake**, USS *Albany* (CA) and *William Wood* (DD) provided disaster relief to the citizens of Volos, Greece, from 19 through 21 April 1955.

Mexico, October 1955

“CVL-48 *Saipan*, with Helicopter Training Unit 1 aboard, was tasked to Tampico, Mexico, disaster relief operations for 3-10 October 1955. During these operations, the helicopters rescued 5,439 persons marooned on rooftops, trees and other retreats, and delivered 183,017 pounds of food and medical supplies. Helicopters from MAG-26, VMRs 153 and 252, and specialists from the 2d MAW also aided in the rescue work.

Spain, September 1957

“Starting on 16 October 1957, USS *Lake Champlain* (CVS-39) with Marine Helicopter Squadron 262 embarked, aided in locating, feeding, and rescuing victims of a severe **flood** in the area of Valencia, Spain. Additional ships involved included USS *Washtenaw County* (LST) and *Thuban* (AKA).

Ceylon, January 1958

“Navy and Marine Corps (20 from HMR-162) helicopters operating off LPH *Princeton* engaged in rescue work from 2 to 7 January 1958 following major **floodings**. Two destroyers (*Eversole* and *Shelton*) from the 7th Fleet and the tender *Duxbury Bay* from the Middle East Force aided the relief operations.

Marshall Islands, January 1958

“On 9 January 1958, Pacific Fleet air units began delivery of emergency supplies to inhabitants of several islands in the Marshalls, which had been severely damaged by **Typhoon Ophelia**.

Washington, D.C., February 1958

“**Severe cold weather** during the week of 17 February 1958 froze the Potomac River and stopped the movement of fuel barges. With the aid of a U.S. Coast Guard buoy tender to break the ice, USNS *Mission Bouna Ventura* delivered 60,000 barrels of fuel oil from Norfolk, Virginia, to Alexandria, Virginia. At the time of arrival of the tanker, only about four hours' fuel supply remained in the General Services Administration storage tanks.

Japan, December 1958

“Nine ships of an ASW group, including CVS *Yorktown*, were diverted from operations at sea to aid the people of Koniya, Japan, who had been left homeless by a **fire** that swept through the town and destroyed most of its dwellings. Within 24 hours of the disaster, the group delivered food, medicines, clothing,

blankets, and tents to the needy. Men from the group assisted on the scene until Japanese relief agencies could cope with the situation.

Morocco, December 1958

“On 25 December 1958, Navy aircraft from the Naval Air Station, Port Lyautey, rescued 134 persons from a **flooded area** in Morocco.

New Zealand, March 1959

“On 20 March 1959, USS *Staten Island* (AGB) departed Wellington, New Zealand, with emergency supplies for the **storm-devastated** New Zealand territorial island Niue, which is south of Samoa. *Staten Island* delivered six tons of food and clothing.

Uruguay, April 1959

“Helicopters (HU-2s) from the ice breaker *Edisto* aided in rescue operations in the Montevideo, Uruguay, area after **flooding**. During ten days of operations (16-26 April 1959), the HU-2s carried 277 flood victims to safety.

Taiwan, August 1959

“During a **major flood** in central Taiwan, LPH-6 *Thetis Bay* provided assistance from 14 to 20 August 1959. Helicopters from Marine Helicopter Squadron 261 flew 897 mercy missions from the ship, airlifting 1.6 million pounds of relief supplies and 855 refugees.

India, September 1959

“From 21 through 26 September 1959, USS *John S. McCain* (DL) made a goodwill visit to Calcutta, India. *McCain* delivered medical supplies for **flood** victims in West Bengal.

Japan, September 1959

“Following a devastating **typhoon**, units of the U.S. Seventh Fleet (including the aircraft carrier *Kearsarge*) distributed over 200,000 pounds of food and medicine, administered over 17,000 typhoid and antibiotic shots to prevent the spread of disease, and evacuated victims in Nagoya, Japan. Relief operations were conducted from 29 September through 6 October 1959.

France, December 1959

“From 3 through 6 December 1959, CVA *Essex*, CAG *Boston*, DD

Vogelsang, DD *Mullinnix*, and DD *Myles C. Fox* aided relief efforts in the San Raphael area of France after a **dam burst**.

Morocco, February-March 1960

“U.S. Naval aircraft shuttled supplies and equipment to Agadir, Morocco, from Port Lyautey after severe **earthquakes** devastated the city. In these flights, from 29 February through 6 March 1960, the aircraft also evacuated the injured. USS *Newport News* (CA) provided emergency supplies, a helicopter, and communication facilities at the scene of the disaster, and 147 Navy and Marine personnel aided in rescuing survivors trapped in the debris.

Brazil, April 1960

“From 2 through 13 April 1960, USS *Glacier* (AGB) conducted **flood**-relief operations near Fortaleza, Brazil. *Glacier* was diverted from transit from Antarctica to the United States.

Chile, June 1960

“From 26 June through 15 July 1960, USS *Catamount* (LSD) and an embarked boat group conducted **flood**-relief operations in the area of Valparaiso, Chile.

Nevada and California, USA, August 1960

“Almost 700 Navy personnel from the Naval Auxiliary Air Station, Fallon, Nevada, and from the San Francisco area, helped rangers fight **large forest fires** in the Tahoe National Forest.

Florida, September 1960

“From 4 through 12 September 1960, USS *Bushnell* (ASR) and *Penguin* (ASR) conducted relief operations in the Marathon, Florida, area following **Hurricane Donna**.

Haiti, November-December 1960

“**Flooding** of Lake Miragoane washed out a bridge linking a portion of southwest Haiti with the remainder of the country. Marine Assault Construction Battalion personnel constructed a new bridge and 6.5 miles of improved road in 29 days.

Texas, September 1961

“On 12 September 1961, the Navy organized a seven-ship Task Force 135 to proceed to the Texas coast to conduct relief operations in the wake of **Hurricane Carla**. The ships included CVA-38 *Shangri-La*, CVS-36 *Antietam*, two destroyers, an attack transport, and two fleet tugs.

Belize, November 1961

“On 4 November 1961, a five-ship U.S. Navy relief force departed for Belize, British Honduras, to engage in relief operations following **Hurricane Hattie**. The lead ship was CVS-36 *Antietam*. Helicopters from Training Squadron 8 and Marine Helicopter Squadron 264 carried over 57 tons of food, water, and medical supplies, and transported medical and other relief personnel to areas hit by the hurricane.

Japan, August 1962

“Units of the U.S. Seventh Fleet, including one attack aircraft carrier, provided medical assistance, food, and evacuation services to survivors of a **volcano eruption** on Miyako Island, Japan.

Guam, November 1962

“Following damage caused on 11 November 1962 by **Typhoon Karen**, USNS *Fulton* (TAP) furnished electrical power to the stricken island of Guam from 13 to 21 November. The ship's sick bay was used as a hospital--five babies were born on board during this period.

Morocco, January 1963

“From 7 through 13 January 1953, helicopters from NAS Port Lyautey, NS Rota, and USS *Springfield* flew rescue and relief missions in the **flooded areas** of Beth and Sebou Rivers in Morocco. Over 45,000 pounds of food, medicines, and emergency supplies were flown in, and some 320 marooned persons were lifted to safety.

Haiti, October 1963

“U.S. Navy and Marine Corps units spent nearly two weeks conducting relief operations for the people of Haiti hard hit by **Hurricane Flora**. About 250 tons of relief supplies were airlifted to Haiti by helicopter; another 125 tons were delivered by landing craft in an across-the-beach operation. Ships participating were CVS-39 *Lake Champlain*, APD-60 *Liddle*, AKA-61 *Muliphen*, and LPH-6 *Thetis Bay*. Navy and Marine Corps cargo aircraft delivered supplies from East Coast stations.

Alaska, March 1964

“On 28 March 1964, within five hours after a devastating **earthquake** in Alaska, the seaplane tender *Salisbury Sound* was under way from NAS Whidbey Island to render assistance. P-3A Orions and C-54 Skymasters, moving up from Moffett Field, were also en route with emergency supplies within hours of the earthquake. For 14 days, *Salisbury Sound* provided power and heat to the severely damaged Naval Station at Kodiak while its crew served in many capacities to help people ashore.

Costa Rica, May 1964

“At the request of the Costa Rican government, a team of 33 Navy Seabees and 271 tons of heavy construction equipment were transported to Costa Rica by air to carry out emergency **flood-control** measures in the area of Mt. Irazu.

Hispaniola, August 1964

“On 29 August 1964, LPH-4 *Boxer* and two LSDs arrived off the coast of Hispaniola to give medical aid and helicopter evacuation services to people in areas of Haiti and the Dominican Republic badly damaged by Hurricane Cleo.

Vietnam, November 1964

“During major **flooding** of Quang Tri, Quang Ngai, and Binh Dinh provinces, amphibious units of Task Force 76 provided relief. For example, USMC helicopters (HMM-162) from LPH *Princeton* delivered 1,300 tons of relief supplies.

Mexico, October 1966

“A joint task force of Marine, Navy, Army, and Air Force personnel airlifted food and supplies to Tampico to victims of **Hurricane Inez**. Over 102,000 pounds of relief supplies were flown in, 80 flood victims were evacuated, and several hundred victims were treated by Navy doctors.

Mississippi, USA, August 1969

“U.S. Navy Seabees and helicopters from Training Squadron Eight (HT-8) evacuated more than 820 persons from Pass Christian, Mississippi, on 20 August 1969 after their town was devastated by **Hurricane Camille**. More than 1,700 Seabees participated in road clearing and salvage projects all along the stricken Gulf Coast. The Construction Battalion Center (which had been hard hit by the hurricane on 17 August, with 46 buildings demolished and 13 Seabees

injured) in Gulfport, Mississippi, was the central point of relief efforts, housing some 500 Georgia Power Company employees and highway repairmen during the cleanup operations. The Seabee center loaned some 45 generators to various hospitals, nursing homes, and other vital locations. The submarine tender USS *Bushnell* (AS-15) provided emergency aid to the residents of Pilottown, Louisiana. The ship's medical officer and corpsmen went ashore to provide medical care, while other crewmen delivered fresh water and food.

My note: A childhood friend of mine and his family spent a night clinging to a torn off piece of the roof of their house in Mississippi during Hurricane Camille.

Tunisia, October 1969

“Following **flooding** in Tunisia in October 1969, helicopters off AFS-5 *White Plains* flew a number of relief missions. Six of the pilots, from Helicopter Support Squadron, Detachment 86, were awarded Tunisia's “Order of the Republic, Degree of Chevalier” on 17 February 1970.

Peru, June 1970

“On 9 June 1970, following a major **earthquake** in Peru, USS *Guam* left Panama for Peru. On 12 June, 11 days of relief flights by 16 helicopters of HMM-365 operating off *Guam* began. During the over 800 flights, the helicopters transported medical teams into remote areas, brought back victims for medical care, and delivered more than 55 tons of emergency relief items.

California, USA, September 1970

“Amidst a series of **brush fires** in San Diego County, several hundred U.S. Navy and Marine Corps personnel were committed in “Tempest Rapid” to support local firefighting efforts.

Philippines, September 1970

“Following **Typhoon Georgia**, USMC water purification equipment was flown to the Philippines from Japan.

Philippines, October 1970

“Following **Hurricane Joan** in October 1970, relief operations were conducted off USS *Okinawa* (LPH-3), USS *Anchorage* (LSD-36), and USS *Duluth* (LPD-6). CH-46 helicopters from HMM-164 flew 70 relief sorties and delivered over 65 tons of supplies in five days of operations. USN and USMC medical teams treated over 1,000 patients following the hurricane.

Vietnam, October 1970

“Following the ravages of **Typhoon Kate** and flood waters that inundated some 140 square miles of Vietnam south of Da Nang, the helicopter forces of 1st Marine Aircraft Whig performed rescue and relief operations for over 9,000 South Vietnamese. Initial rescue operations began on 29 October 1970 when MAG-16 evacuated some 900 people on the first day during floods deemed the worst since 1964.

Pennsylvania, USA, June 1972

“On 23 June 1972, helicopters from HS-2, HS-15, HS-74, and HS-75 came to the aid of **flood**-stricken residents in the Wilkes-Barre, Scranton, and Pittstown areas of Pennsylvania. Besides the extensive rescue and evacuation work conducted by these squadrons, they also were involved in transporting medical supplies and personnel, equipment, food, and clothing to the flood victims.

Philippines, July 1972

“Following **Typhoon Rita** in July 1972, U.S. military forces provided a wide range of aid to the 500,000 victims. For example, HMM-165 evacuated over 2,000 Filipinos threatened by flooding, included 150 women and children rescued from a flooded island in the Ango River who were brought aboard USS *Tripoli*. USMC helicopters flew in 350 tons of relief supplies, in addition to flying in disaster relief teams and evacuating victims. *Tripoli* was on scene from 22 July until *New Orleans* relieved her on 5 August.

Tunisia, March 1973

“In response to an urgent request for **flood** relief from the American Embassy in Tunisia on 28 March, one aircraft carrier (*Forrestal*) was in position to provide helicopter assistance by first light 29 March (about 13 hours after the request). The helicopter operations were also supported by one destroyer (DDG) and two LPDs. U.S. helicopters flew about 40 sorties, rescuing or relocating 729 persons, moving 27 tons of cargo, lifting 17 doctors to evacuation centers, lifting an emergency appendectomy to the CVA, and evacuating the entire sheep herd (227 sheep) from one flooded village. In addition, the carrier's bakery provided 1,200 loaves of bread for distribution, and crew members contributed money to buy supplies for homeless children. During the relief mission, U.S. personnel temporarily based at Tunis airport coordinated the rescue efforts flown by helicopters, not only of U.S. forces, but from Tunisia, Italy, France, and Libya as well.

Tunisia, December 1973

“From 14 through 17 December 1973, helicopters from USS *Iwo Jima* conducted refugee rescue, equipment deliveries, and other **flood**-associated missions in Tunisia.

Philippines, August 1974

“Following major **flooding** in the Philippines, helicopters from HMM-164 (off LPH-10 *Tripoli* and AFS-7 *San Jose*), as well as USN helicopters, flew 244 sorties over six days of operations (18-24 August 1974). USAF support included flying supplies from Manila to Clark Air Force Base. Both rescue missions and food-delivery flights were flown.

Mauritius, February 1975

“On 9 February 1975, AOE-2 Camden began disaster relief operations at Mauritius following **Cyclone Cervaise**. CVAN-65 *Enterprise*, CGN-9 *Long Beach*, and AFS-1 *Mars* joined the relief operations the next day. Carrier personnel spent more than 10,000 man-hours rendering such assistance as restoring water, power, and telephone systems; clearing roads and debris; and providing helicopter, medical, food, and potable water support to the stricken area. *Enterprise* departed on the 16th.

Washington State, December 1975

“Helicopters from Whidbey Island Naval Air Station conducted SAR operations in the northwestern areas of Washington State **flooded** by recent rains. Over four days, some 113 people were rescued after being stranded by the flood waters.

Guatemala, February 1976

“In late February 1976, three ships from Amphibious Squadron Four (LST-1190 *Boulder*, LST-1193 *Fairfax County*, and LSD-34 *Hermitage*) transported U.S. Army Engineers from Morehead City, North Carolina, to Guatemala for road and construction work following devastating earthquakes. The engineers were transported back to the United States by ships from Amphibious Squadron Two in late April.

My note: A friend of mine from XVIII Airborne Corps participated in this.

Italy, May 1976

“Following a 6 May 1976 **earthquake** in the Tagliamento River valley northeast of Venice, more than ten tons of relief supplies were flown in from the

Naples Navy community by USN C-130 Hercules aircraft.

Guam and Philippines, May 1976

“Following massive damage caused by **Typhoon Pamela** on 20 May 1976, U.S. Navy ships (including AD-14 *Dixie*, LST-1193 *Peoria*, and TAKR-9 *Meteor*) assisted in recovery work in Guam. MSC ships transported disaster relief supplies from Subic Bay to Guam. Over 1,000 Seventh Fleet personnel assisted in relief efforts in the civilian community. On 21 May, **Typhoon Olga** moved across central Luzon and caused massive flooding. U.S. Navy and U.S. Air Force personnel conducted disaster relief operations with helicopters delivering emergency supplies to isolated communities. Over 1,900 people were evacuated, and more than 370,000 pounds of disaster relief supplies and 9,340 gallons of fuel were provided by Navy and Air Force helicopters. Helicopters from HS-4 aboard *Ranger*, from HC-3 on *Camden*, *Mars*, and *White Plains*; and from NAS Cubi Point assisted in the Philippine disaster-relief effort.

Venezuela, July 1976

“The Military Sealift Command ship USNS *Sealift Arctic* (TAO-175) spent 30 days shuttling fresh water to Curacao to relieve a severe water shortage due to **drought** and an accident to Curacao Island’s water distillation plant.

Azores, January 1980

“On 2 January 1980, a detachment of P-3B Orions of VP-10, deployed at Rota, Spain, flew photo reconnaissance missions to locate areas damaged in the **earthquake** that had struck the Azores the day before, killing some 50 persons and injuring another 500.

Algeria, October 1980

“On 12 October 1980, ships of the Amphibious Forces, Sixth Fleet, including USS *Guadalcanal*, began assisting the victims of a massive **earthquake** that had devastated the Algerian city of Al Asnam. The ships took up positions 20-25 miles offshore to render helicopter support in the disaster relief efforts.

Italy, November 1980

“On 25 November 1980, RH-53D Sea Stallions from VR-24, together with units of the U.S. Army and Air Force, began disaster-relief assistance to victims of the devastating **earthquake** at Avellino, Italy. The earthquake, on 23 November, killed over 3,000 persons and left many more homeless. The Commander, Fleet Air, Mediterranean, headquartered at Naples, was director of the U.S. military support efforts.

Louisiana, USA, May 1983

“At the request of the Governor of Louisiana, on 29 May 1983 the Marine Corps provided assault amphibian vehicles (AAVs) to assist in **flood-control** efforts as the rising Mississippi River threatened the Louisiana State Penitentiary at Angola.

Sardinia, July 1983

“Several hundred sailors from SSN-637 *Sturgeon*, SSN-679 *Silversides*, and AS-18 *Orion* fought **fires** and assisted local rescue efforts on Sardinia.

Exxon Valdez Oil Spill, Prince William Sound, April-August 1989

“Following the *Exxon Valdez* **oil spill** in Prince William Sound, two U.S. Navy amphibious ships (LPD-10 *Juneau* and LSD-43 *Fort McHenry*) supported oil clean-up efforts. The ships operated as floating hotels for members of the cleanup crew and acted as the command centers for the clean-up effort.

Hurricane Hugo, September-October 1989

“Following **Hurricane Hugo** (21 September 1989), Marines from Camp Lejeune, with Navy medical corpsmen, assisted in the Charleston, South Carolina, area through 10 October. At the height of operations, over 850 Marines and sailors were involved, with 8 CH-53s, 2 KC-130s, and other equipment used.

“U.S. Navy ships provided relief support throughout the affected areas in the Caribbean. Over ten ships were involved, including: LSD *Whidbey Island*, LST *Spartanburg County*, and ARS *Preserver* at Roosevelt Roads, Puerto Rico; CGN 25 *Bainbridge* and LSD-38 *Pensacola* at St. Croix; and, LPD-4 *Austin* at Culebra. Other ships participating in relief efforts included DDG-46 *Preble*, AE-28 *Santa Barbara*, FFG-16 *Clifton Sprague*, DD-18 *Semmes*, FFG-29 *Stephen W. Groves*, TAO-143 *Neosho*, DDG-43 *Dahlgren*, FF-1096 *Valdez*, and LSD-44 *Gunston Hall*.

California, USA, October 1989

“Following the 17 October 1989 **earthquake** in the San Francisco area, a variety of Naval forces provided relief services, with a total of 24 U.S. Navy and Military Sealift Command ships rendering assistance. LHA-5 *Peleliu* provided shelter for 300 victims and provided helicopter support. FF-1060 *Lang* provided steam for power generation, FF-1054 *Gray* provided electric power,

CGN-39 *Texas* provided communications support. Helicopter detachments supporting relief efforts flew from AOR-3 *Kansas City* and AE-32 *Flint*, and Marines from the LST-1185 *Schenectady* aided local relief efforts.

“CG-21 *Gridley* provided fresh water and other services to Treasure Island, because supplies were interrupted by broken pipes. Helicopters from Helicopter Mine Countermeasures Squadron One Five (HM 15) provided heavy-lift capability in the disaster area.

My note: One of my sisters lived in the area when the earthquake struck.

Samoa, March 1990

“In March 1990, a detachment of 30 Seabees from Naval Mobile Construction Battalion (NMCB) 133 deployed from Guam to Samoa for 30 days to repair damage done by **Hurricane Ofa** in February.

Antigua, April 1990

“Seven months following **Hurricane Hugo**, on 26 April 1990, FFG-24 *Jack Williams* loaded 12 tons of medical supplies donated by citizens of Charleston for delivery to Antigua on April 30.

Philippines, July 1990

“On 16 July 1990, an **earthquake** measuring 7.7 on the Richter scale occurred in central Luzon. U.S. Navy and Marine Corps assistance included a Navy Medical Contingency team and a Marine Combat Service Support Team (CSST) transported to Cabanatuan City (about 75 miles north of Manila, close to the epicenter) on the day of the earthquake.

—[*A Sampling of U.S. Naval Humanitarian Operations*](#)

search and rescue

search and rescue

Search and rescue at sea is one of the primary missions of the U.S. Coast Guard.

icebreaker

► From [USCGC Healy \(WAGB-20\)](#), Wikipedia:

‘

USCGC *Healy* is designed to break 4.5 ft (1.4 m) of ice continuously at 3 knots (5.6 km/h; 3.5 mph) or ice 10 ft (3.0 m) thick when backing and ramming, and can operate in temperatures as low as -50°F (-46°C). As a Coast Guard cutter, *Healy* is also a platform for supporting other potential missions in the polar regions, including: research, search and rescue, ship escort, environmental protection, and law enforcement.



BERING SEA - The Coast Guard Cutter *Healy* approaches the Russian-flagged tanker *Renda* while breaking ice around the vessel 97 miles south of Nome, Alaska, Jan. 10, 2012. The two vessels departed Dutch Harbor for Nome on Jan. 3, 2012.

U.S. Coast Guard photo by Petty Officer 1st Class Sara Francis

10 April 2012: *Healy* received the Coast Guard Unit Commendation award for exceptionally meritorious service from 3 January to 5 February 2012, after she escorted a tanker carrying a critical load of fuel through tremendously difficult winter ice conditions to Nome, Alaska. In November 2011, a strong winter storm struck western Alaska, which prevented a vital fuel delivery to Nome. *Healy* delayed her return home from a six-month Arctic deployment in order to escort the Russian-flagged tanker *Renda* to Nome. *Healy* escorted *Renda* through over 300 nmi (560 km; 350 mi) of extremely difficult ice conditions and broke out the beset ship time after time. After many days of great exertion, *Renda* transferred the fuel to Nome, over the course of three days. On 20 January, *Healy* began the break out for herself and *Renda*. They emerged from the ice on 29 January 2012, after successful completion of the mission. This was the first-ever winter fuel delivery from the water in Western Alaska.

7 May 2003: *Healy* received the Coast Guard Unit Commendation award for exceptionally meritorious service from January 2003 to April 2003, while conducting Operation Deep Freeze in support of the U.S. Antarctic Program. With less than three weeks' notice, *Healy* was deployed to Antarctica in support of the critical annual re-supply of McMurdo Station. *Healy* played an instrumental role in coordination with Polar Sea in resupplying the ice station.

Healy successfully escorted the freighter *American Tern* and the tanker *Richard G. Matthieson*. *Healy* successfully escorted both ships in and out of the ice, and facilitated the delivery of resources to McMurdo Station.

—[USCGC Healy \(WAGB-20\)](#), *Wikipedia*

hospital and medical

hospital and medical

Gerald R. Ford, first in the class, has an on-board hospital that includes a full laboratory, pharmacy, operating room, 3-bed intensive care unit, 2-bed emergency room, and 41-bed hospital ward, staffed by 11 medical officers and 30 hospital corpsmen.

Nimitz-class aircraft carrier has a 53-bed hospital ward, a three-bed ICU, and acts as the hospital ship for the entire carrier strike group. In one year, the medical department of USS *George Washington* handled over 15,000 out-patient visits, drew almost 27,000 labs, filled almost 10,000 prescriptions, took about 2,300 x-rays, and performed 65 surgical operations.

Wasp-class amphibious assault ship (LHD) has 6 operating rooms, 14 ICU beds, 46 hospital beds, 4 battle dressing stations, medical imaging (i.e.:X-ray), a fully functional laboratory, and a blood bank. The ship can expand its medical complement to 600 beds, making it the second largest hospital at sea, second only to actual hospital ships.

The Chinese *Daishan Dao* hospital ship has 300 hospital beds, 20 intensive care beds, 8 operating theatres, X-ray, ultrasound, CT, hypothermia, hemodialysis, traditional Chinese medicine, and dental facilities.

The Indonesian *KRI dr. Soeharso (990)* hospital ship is capable of receiving up to 2000 patients and has 5 operating rooms, 6 polyclinics, 51 medical specialists.

The Myanmar *Shwe Pu Zun* and *Thanlwin* hospital ships each have 1 CT scanner, 1 minor eye

operation room, 1 minor operation theater, 1 major operation theater, and 1 intensive care unit.

The Russian *Yenisey*, *Svir*, and *Irtysh* hospital ships each have 100 hospital beds and 7 operating rooms.

The United States *USNS Mercy* and *USNS Comfort* hospital ships each have 1,000 hospital beds, 12 operating rooms, digital radiological services, a medical laboratory, a pharmacy, an optometry lab, an intensive care ward, dental services, a CT scanner, a morgue, 2 oxygen-producing plants.

The French *Mistral*-class amphibious assault ships each have an on board NATO Echelon level-3 hospital, with 69 hospital beds, 7 ICU beds, and an additional 50 beds if needed. The ship also has medical imaging capabilities, such as X-ray, CT-scan and ultrasound.

The British Royal Fleet Auxillary ship RFA *Argus* would be a hospital ship were it not for its armaments. However, it is instead designated as a “Primary Casualty Receiving Ship” (PCRS). It has 70 beds, an intensive-care unit, and can provide medical x-ray and CT-scan services. Casualties can be quickly transferred from the deck directly into the assessment area. It has a ramp for emergency exit for hospital trollies and patients as well as two 50-man passenger lifts that lead to a new structure erected on the flight deck. The armament is two Oerlikon 20 mm/85 KAA on GAM-BO1 mountings, four 7.62mm GPMGs Mk44 Miniguns, and Seagnat chaff launchers.

construction

construction

U.S. combat engineers have rebuilt roads, bridges, buildings, and other structures after earthquakes.

➤ From [A Sampling of U.S. Naval Humanitarian Operations](#):

‘

Haiti, November-December 1960

“**Flooding** of Lake Miragoane washed out a bridge linking a portion of southwest Haiti with the remainder of the country. Marine Assault Construction Battalion personnel constructed a new bridge and 6.5 miles of improved road in 29 days.

Costa Rica, May 1964

“At the request of the Costa Rican government, a team of 33 Navy Seabees and 271 tons of heavy construction equipment were transported to Costa Rica by air to carry out emergency **flood-control** measures in the area of Mt. Irazu.

Mauritius, February 1975

“On 9 February 1975, AOE-2 Camden began disaster relief operations at Mauritius following **Cyclone Cervaise**. CVAN-65 *Enterprise*, CGN-9 *Long Beach*, and AFS-1 *Mars* joined the relief operations the next day. Carrier personnel spent more than 10,000 man-hours rendering such assistance as restoring water, power, and telephone systems; clearing roads and debris; and

providing helicopter, medical, food, and potable water support to the stricken area. *Enterprise* departed on the 16th.

Guatemala, February 1976

“In late February 1976, three ships from Amphibious Squadron Four (LST-1190 *Boulder*, LST-1193 *Fairfax County*, and LSD-34 *Hermitage*) transported U.S. Army Engineers from Morehead City, North Carolina, to Guatemala for road and construction work following devastating earthquakes. The engineers were transported back to the United States by ships from Amphibious Squadron Two in late April.

—[A Sampling of U.S. Naval Humanitarian Operations](#)

A friend of mine from XVIII Airborne Corps participated in this. He was transported by U.S. Air Force airlift.

➤ From [Operation Earthquake](#):

An earthquake registering 7.5 on the Richter scale struck southern Guatemala at 2:50 a.m. on Wednesday, February 4, 1976. Although it lasted less than one minute, it left almost 23,000 people dead and over 76,000 injured. One-fourth of Guatemala's population—1.5 million people—were left homeless. The quake destroyed 300 towns along the Motagua and Mixco faults north and west of Guatemala City. The most severe damage occurred in a 100-mile arc to the north and west of the capital, where many of the country's inhabitants were concentrated. Over 1,000 aftershocks compounded the catastrophe. In the town of Progreso, only two buildings were left standing; and at San Mart'n, where no house survived, 3,000 people died—10 percent of the population.

President Kjell Laugerud Garc'a of Guatemala immediately appealed to the United States for emergency aid. Within 24 hours of the initial tremor, MAC established an airlift from Howard AFB in the Panama Canal Zone to La Aurora Airport in Guatemala City. Led by MSgt. Wayne W. Frankenberger, a 1300th Military Airlift Squadron combat control team arrived in La Aurora on February 4 to assess damage and establish air traffic control communications for the airlift. Within 10 days, Air Force cargo aircraft moved over 444 tons of supplies

and 230 support personnel to Guatemala, including a 100-bed field hospital, 500 tents, a 15-kilowatt generator, 10,800 penicillin tablets, and 500 pints of blood plasma.

By the end of February, the Twenty-first Air Force had flown 19 strategic airlift missions to Guatemala, carrying communications equipment from Charleston AFB, South Carolina; a mobile hospital from Altus AFB, Oklahoma; dry rations from Memphis, Tennessee, and Fort Smith, Arkansas; helicopter support equipment from Gray Army Air Field, Texas, and Harrisburg, Pennsylvania; water trailers from Howard AFB; a hospital unit from Fort Dix, New Jersey; and an environmental health unit and engineering personnel from Pope AFB, North Carolina.

By March 8, just over a month after the disaster struck, the Air Force had sent more than 60 planeloads of relief supplies and personnel to Guatemala from 10 U.S. bases. The Military Airlift Command transported medicine, water purification systems, blankets, clothing, fresh water, and construction equipment to clear roads and rebuild housing. Nine C-130s also delivered bulk fuel to support Army helicopters that flew mercy flights to remote sites within the country beginning February 10. By the end of Operation Earthquake, MAC had hauled 696 emergency support personnel to Guatemala, including medical doctors, nurses, engineers, and communications experts.

—[Operation Earthquake](#)

- From [A Sampling of U.S. Naval Humanitarian Operations](#):



Louisiana, USA, May 1983

“At the request of the Governor of Louisiana, on 29 May 1983 the Marine Corps provided assault amphibian vehicles (AAVs) to assist in **flood-control** efforts as the rising Mississippi River threatened the Louisiana State Penitentiary at Angola.

Samoa, March 1990

“In March 1990, a detachment of 30 Seabees from Naval Mobile Construction Battalion (NMCB) 133 deployed from Guam to Samoa for 30 days

to repair damage done by **Hurricane Ofa** in February.

—[*A Sampling of U.S. Naval Humanitarian Operations*](#)

scientific research

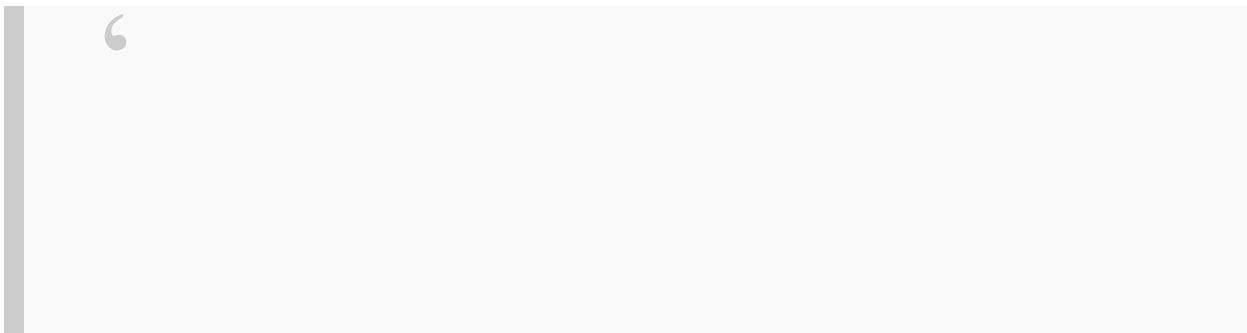
scientific research

The ships of the proposed Native National Guard can be used for scientific research.

The U.S. National Oceanic and Atmospheric Administration (NOAA) currently has 42 scientific research ships in its fleet.

The U.S. National Oceanic and Atmospheric Administration (NOAA) employs civilian mariners aboard NOAA research and survey ships. Professional mariner personnel include licensed masters, mates, and engineers, and unlicensed members of the engine, stewards, and deck department. Survey and electronic technicians operate and/or maintain the ship's mission, communication and navigation equipment.” —[NOAA ships](#)

➤ From [USCGC Healy \(WAGB-20\)](#), Wikipedia:





USCGC HEALY's small boat 26321 conducts science operations gathering water samples in the Arctic Ocean during Arctic West Summer 2015.

photo by Petty Officer 2nd Class Cory J. Mendenhall, licensed under [Creative Commons Attribution-Share Alike 4.0](#)

[International](#)

Designed to conduct a wide range of research activities, USCGC *Healy* provides more than 4,200 square feet (390 m²) of scientific laboratory space, numerous electronic sensor systems, oceanographic winches, and accommodations for up to 50 scientists.



U.S. Coast Guard Cutter *Healy* (WAGB-20) sits approximately 100 miles north of Barrow, Alaska, in order to conduct

scientific ice research. Scientists aboard the *Healy* are taking core samples from the bottom of the Arctic Ocean, June 18, 2005.

U.S. Coast Guard/DoD

Healy operates two A-Frames, one on the aft working deck and one on the starboard side. There are two articulated cranes on the aft working deck, with the starboard side rated to 15 short tons (14 t) and the port side rated to 5 short tons (4.5 t). The aft working deck provides ample space to conduct science and research operations. *Healy* has a forecastle crane with a load capacity of 3 short tons (2.7 t), and two 04 level cranes with load capacities of 15 tons each. *Healy* has a Dynamic Positioning System (DPS) that uses her 2200HP Omnithruster Bow Thruster system, which aids in navigation and station keeping during science operations. Her flight deck is capable of landing both of the Coast Guard's helicopter airframes, and attached is a hangar that can house 2 Eurocopter HH-65 Dolphin helicopters. *Healy* can accommodate 8 ISO vans on the ship, which are used as science labs and workstations. *Healy* has three small boats on board. One is the 38 ft (12 m) Arctic Survey Boat (ASB), which is on the starboard side. *Healy* has two 26 ft (7.9 m) Cutter Boat Large (CBL) Rigid Hull Inflatable Boats (RHIB), one on each side.



An aft view of USCGC HEALY and its A-frame.

Photo by Bhagerty4, licensed under [Creative Commons Attribution-Share Alike 4.0 International](https://creativecommons.org/licenses/by-sa/4.0/)

2016: On 15 October 2016, *Healy* returned to her home port in Seattle, after a 127-day summer deployment in the Arctic Ocean. The crew of *Healy*, and her

accompanying scientists, participated in three scientific studies. Highlights of this deployment include the discovery of new species of jellyfish in the Chukchi Sea, observations of the continental shelf in the Arctic Ocean and Bering Sea, and data collection on climate change.

29 October 2015: *Healy* received the Coast Guard Unit Commendation award for exceptionally meritorious service from 24 June to 29 October 2015, during their Arctic West Summer 2015 deployment. *Healy* traveled over 16,000 nmi (30,000 km; 18,000 mi), took over 25,000 water and ice samples from 72 science stations, and became the first unaccompanied U.S. surface vessel to reach the North Pole. She also engaged with the crew of the German icebreaker *Polarstern* while at the North Pole, in support of the international scientific mission Geotraces. Finally, *Healy* became the first vessel to broadcast a live feed from ice-bound Arctic waters, streaming video of a search and rescue exercise to shore-based coordinators.

2013: Arctic West Summer 2013 (AWS13) consisted of four different missions for *Healy*, over which more than 19,000 nmi (35,000 km; 22,000 mi) were covered. The first mission utilized *Healy*'s unique over-the-side science capabilities in order to collect organisms and create an ecological picture of the Hanna Shoal region. The second mission yielded sediment samples from the Mackenzie River Basin through the use of coring devices. For the third mission the Coast Guard Research Development Center, in coordination with the National Oceanic and Atmospheric Administration, deployed numerous equipment for testing and development. The fourth and final mission deployed subsurface moorings and conducted numerous CTD tests to study the Alaskan Boundary Current. A group of researchers from the Naval Submarine Medical Research Laboratory tested their Submarine Team Behaviors Tool with *Healy*'s crew in September 2013. They were part of the 50 person science team from the USCG Research and Development Center that evaluated technology for the recovery of "simulated oil trapped in or under ice at the polar ice edge".

2011: During Arctic West Summer 2011 (AWS11), *Healy* collaborated with researchers from NASA to study the refractive properties of sunlight in the Arctic. *Healy* spent the summer mapping the Extended Continental Shelf in collaboration with CCGS *Louis S. St-Laurent*. A third mission of this patrol studied organic carbon and its levels in the Arctic water column. This data was used to explain bacteria distribution in the water column as well as carbon dioxide and biomass cycles.

20 January 2010: *Healy* received the Coast Guard Coast Guard Meritorious Unit Commendation award for meritorious service from 6 August to 16 September 2009, while conducting the Joint U.S.-Canada United Nations Convention on the Law of the Sea Extended Continental Shelf Mapping

Expedition. In collaboration with CCGS *Louis S. St-Laurent*, Healy pushed 150 nmi (280 km; 170 mi) further north than planned and avoided \$2.4 million in future expedition mapping costs. *Healy* also acquired over 1,000 lb (450 kg) of valuable geological samples by conducting dredging operations at depths of up to three mi (4.8 km). The rare samples were essential in establishing the origin of the targeted extended continental shelf.

2009: A marine biological mission aboard *Healy* studied the ecosystem of the Bering Sea, specifically the sea ice and its future affects on sea life population. The study included a number of biological focuses which recorded seabird and micro zooplankton populations, as well as assessing phytoplankton, sea ice algae, nitrogen, and sediment. Additionally Oceanographer Evelyn Lessard co-led a team to study krill populations to assess how climate change will affect the fisheries.

16 July 2008: *Healy* received the Coast Guard Coast Guard Meritorious Unit Commendation award for meritorious service from April 2007 to July 2008, while conducting science operations in support of national scientific, economic, and political interests. *Healy* conducted a multi-year project in order to evaluate the entire ecosystem of the Bering Sea. Data collected during these missions helped improve the understanding of food webs and biological communities in the Arctic. Through superior mission execution in adverse weather, *Healy* exceeded expectations significantly.

23 January 2002: Healy received the Coast Guard Coast Guard Meritorious Unit Commendation award for meritorious service from 12 June 2001 to 21 December 2001, during the Arctic East 2001 Science Mission. Healy mapped 1,100 nmi (2,000 km; 1,300 mi) of the Gakkel Ridge, previously the only unmapped undersea ridge in the world. Twelve previously unknown volcanoes and numerous undersea hydrothermal vents were discovered. Eight short tons (7.3 t) of rock samples were taken from over 100 deep sea dredges.

—[USCGC Healy \(WAGB-20\)](#), Wikipedia

anti-piracy

anti-piracy

Many modern navies provide shared anti-piracy ships to patrol critical maritime chokepoints.

These include: Arafura Sea, Bab el-Mandeb Strait (including Suez Canal), Baltic Sea, Bering Strait, Black Sea (including Turkish Straits), Cape of Good Hope, Panama Canal, South China Sea, Dover Strait, Drake Passage (Mar de Hoces), Sea of Japan (East Sea), Mediterranean Sea (including Strait of Gibraltar and Turkish Straits), Norwegian Sea, Strait of Hormuz, and Strait of Malacca.

anti-piracy

Note that the Russians created the *Kiev*-class heavy aviation cruiser (Тяжелые авианесущие крейсера) rather than a normal aircraft carrier because this designation allowed the ships to transit the Turkish Straits, while the 1936 Montreux Convention prohibited aircraft carriers heavier than 15,000 tons from passing through the Straits.

combat

combat

This is the capability that will obtain U.S. government funding. This is the only part the U.S. Military-Industrial Complex (MIC) cares about.

See the chapter on shore bombardment for an unfulfilled U.S. military need.

➤ From [What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of *the Battleship Book* and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky:

Until fairly recently, the U.S. Navy leaned away from using surface ships in an anti-ship role, preferring aircraft and submarines. With the advent of “distributed lethality,” or the idea of networking everything that flies or floats into a giant kill-chain however, surface vessels have gotten back into the job of ship-killing.

Attacks against land were also historically an important, if secondary, role for a battleship. Even before the end of World War II, however, battleships more often found themselves hitting land targets than pounding one another. After the war, land attack became paramount, and the Iowa class battleships acted primarily as land attack platforms, hitting the enemy not only with guns, but also with long-range missiles. Given the complexity of fighting a modern anti-access/area denial system, [a modern armored ship] requires a substantial land attack capability, manifested in guns and missiles.

—[What A 21st Century Battleship Could Look Like](#), by Dr. Robert Farley, author of the Battleship Book and professor of national security and defense at the Patterson School of Diplomacy and International Commerce at the University of Kentucky

shore bombardment

shore bombardment

My recommended military use is to support ground troops delivered by amphibious and airborne means.

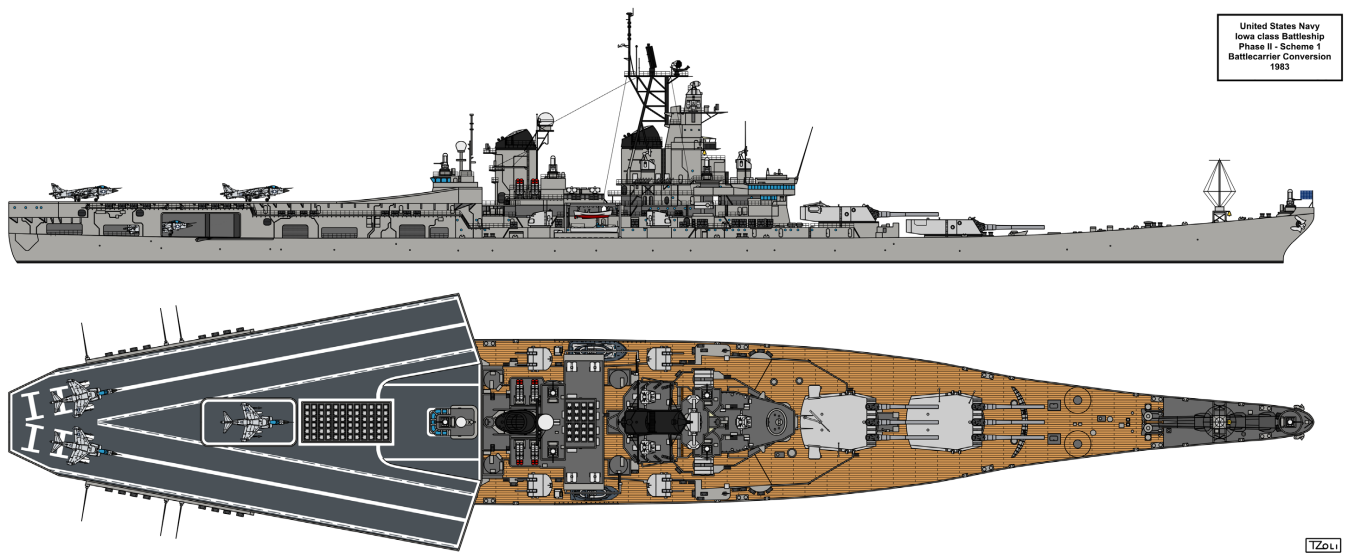
This would be based on the Soviet *Kiev*-class heavy aircraft carrier or the uncompleted *Iowa*-class Phase II Battlecarrier Conversion.



Soviet *Kiev*-class aircraft carrier (CVHG) *Novorossiysk*

photo by US Navy 25 March 1986

The U.S. Marine Corps keeps requesting a battle-ship style armored ship to support the Marines with shore bombardment.



Iowa Phase II Battlecarrier Conversion

by Tzoli 2015

► From [Raising the Iowa: Reactivate the Iowa Class Battleships to Fill the Naval Gunfire Support Vacancy](#), USMC Command and Staff College, 11 April 2010:

Author: Major Rene Torres, United States Marine Corps

Thesis: While US troops (both Marines and Army) transition from ship to shore, the Navy should re-commission the mothballed *Iowa* class battleship in order to fill the present fire support gap and incorporate the larger caliber (16 inch) gun systems in the development of future Naval Surface Fire Support (NSFS) platforms.

My note: By 2012 all four *Iowa*-class battleships had become museum ships.

Discussion: The nation ceased to obtain a viable Naval Gunfire Support (NGFS) capability since [it] decommissioned the *Iowa* class battleships in the early 1990s. With the loss of this valuable asset and the absence of a near-peer competitor in the Soviet Union, both the Navy and Department of Defense (DOD) have strayed from the value and necessity of the large caliber (16-inch) naval gun and the platform in which it is mounted. Over the years the Navy has developed an over reliance on precision guided missile munitions. The Navy's leadership convinced both congress and the Marine Corps that the combination of the smaller caliber, single gun mounted NGFS shooters and precision missiles could support the needs of the littoral ground forces. A driving desire

for a modernized fleet coupled with a belief that the amphibious assault mission has been filed away in history, the Navy has spent years of development and funding on smaller caliber platforms that lack the lethality and volume of fire to support the land component. As a result of the advancements in anti-ship missiles amongst the world's belligerents, the combination of the Navy's doctrine and current NGFS ranges, today's NSFS providers have been rendered useless to the ground commander. With little effort and funding compared to the money that the Navy has invested since 1991, the reactivation of the nine by 16-inch caliber *Iowa* class battleship, can not only fill the NGFS vacancy, but bolster the current battle groups with their multi-mission abilities and relieve some of the pressure from the nation's aircraft carriers. Existing technologies will allow the Navy to provide effective and lethal naval gunfire for a greater duration while reducing the ship's threat [from] anti-ship missiles.

Conclusion: It is apparent to both the Marine Corps and the Joint Force community that during a time of increased readiness and instability around the world, coupled with the military advancements of China as a near-peer competitor within the next five to ten years, the capability of forcible entry from the sea is an essential mission that the U.S. must not only maintain, but improve on as well. However, there remains to be, and for the foreseeable future, a crucial gap in Naval Gunfire Support. As the Navy continues to ignore the capabilities of a platform that once reigned supreme within its fleet, as well as both the cost effectiveness and lethality of the larger caliber 16-inch gun systems, both the Marine Corps and its Joint counterparts continue to wait for an adequate answer to its NSFS vacancy. A fascination with aviation, missiles, and a modern fleet cannot permit the Department of Defense to continuously ignore this near negligent shortfall. For those that view forcible entry from the sea as an archaic maneuver never to be utilized again, let history's record remind them of the military's scramble to execute the bold landing at Inchon during the Korean War. The amphibious landings were considered obsolete in 1950, as MacArthur's amphibious assault saved a United Nations' force from being driven to the sea. One can venture back a mere twenty years to see the relevance of the threat of an amphibious assault in Desert Storm made on Saddam Hussein's Iraqi Army when the blazing fires of 16-inch guns convinced the Iraqi Army that the amphibious force was the main effort.

With a focus on land-locked Middel Eastern countries in support of overseas contingency operations, the Department of Defense and the Navy cannot afford to allow this delinquent vacancy in fire support. As the world projects China to grow closer to being a near-peer competitor to the United States, possibly capable of deterring an American amphibious assault, and as Iran and North Korea continue to develop their respective nuclear missile programs, the time to restore the optimal NSFS platform to support a viable forcible entry is now. The *Iowa* class battleships can fill this requirement within two to three years, and

their service will not only produce military might, but also serve as a test bed for a future system. The price is right and existing technologies can propel its 16-inch projectiles 24 to 400 km in support of littoral maneuver forces. Continued failure to rectify this issue may lead to the complete loss of the nation's forcible entry capability, leaving out military leaders with limited operational options and possibly irrelevant within the littorals.

—[*Raising the Iowa: Reactivate the Iowa Class Battleships to Fill the Naval Gunfire Support Vacancy*](#), USMC Command and Staff College, 11 April 2010



Image by [David Mark](#)

diplomacy

diplomacy

Armored ships are the only vessels that can be safely brought into ports or near shore in areas where there is active military conflict.

These vessels can carry diplomatic personnel to troubled areas and provide a location for potential or active combatants to negotiate a cease fire or other activities leading to a peaceful resolution.

An unnamed Naval War College professor called super carriers “valuable pieces on the strategic chessboard.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

U.S. super carriers can arrive anywhere in the world within 72 hours. THis is called big-stick demonstrations or carrier diplomacy. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

A U.S. Navy pilot said, “[Our] country’s antiquated predilection toward carrier diplomacy is a strategic liability in a near-peer [Chine and Russia] wartime environment ... Though our ship’s defense systems are more robust and capable than a *Slave*-class cruiser [such as the *Moskva*, we are certainly vulnerable, especially carriers.” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

Martin Alexander, an emeritus professor of international politics at Aberystwyth University in Wales who specializes in militar planning was dismissive of the two most recent aircraft carrier in the British Royal Navy, “Are they £ 12 billion worth of floating pointlessness? Or, as chess pieces (impressive, big, etc.) are all carriers now not much but diplomatic leveraging, the twenty-first century ‘showing the flag’ or ‘send a (BIG!) gunboat’ of our time?” — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022

Alexander thinks that’s too much money for demonstrations of seagoing strength that might

actually prove of little value in a war with a superpower adversary. — [Is This the End of the Age of the Aircraft Carrier?](#) by Marc Wortman, *Vanity Fair*, 5 May 2022



USS *Alabama*, WWII museum ship in Mobile, Alabama

Image by [roamincajun](#)



USS *New Jersey*, WWII museum ship

Image by [Andy Choinski](#)



US Navy ships, carrier task force

Image by [David Mark](#)

language

language

Native Americans were code talkers in both World War I and World War II, sending and receiving messages in Native American languages that the Germans and Japanese could not decode.

During World War I Cherokee and Choctaw transmitted coded messages.

During World War II Navajo code talkers transmitted coded messages in the Pacific, recruited by the U.S. Marine Corps at the recommendation of Philip Johnston, a civil engineer for the city of Los Angeles. Lakota, Meskwaki, Mohawk, Comanche, Tlingit, Hopi, Nakoda, Seminole, Cree, and Crow served as code talkers in the Pacific, North African, and European theaters of war.

There was also a World War II code developed by using words from Comanche, Hopi, Meskwaki, and Navajo languages.



Meme tweeted by @Troydiscospider

Proposed Native American Language Institute on the Presidio of Monterey, next to the Defense Language Institute Foreign Language Center, so that the two institutes can coordinate closely.

There is a problem of white men studying Native American languages, often with permission of the Native American nation, and then copyrighting Native American language and charging Native Americans for access to their own language materials.

The following cautionary story (follow the link to read the entire article) shows why Native American nations must have control over their own languages.

➤ From [Lakota elders helped a white man preserve their language. Then he tried to sell it back to them.](#), by Graham Lee Brewer of NBC News, 3 June 2022:

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The Lakota Language Consortium had promised to preserve the tribe’s native language and had spent years gathering recordings of elders, including Ray Taken Alive’s grandmother, to create a new, standardized Lakota dictionary and textbooks.

But when Taken Alive, 35, asked for copies, he was shocked to learn that the consortium, run by a white man, had copyrighted the language materials, which were based on generations of Lakota tradition. The traditional knowledge gathered from the tribe was now being sold back to it in the form of textbooks.

No matter how it was collected, where it was collected, when it was collected, our language belongs to us. Our stories belong to us. Our songs belong to us,” Taken Alive, who teaches Lakota to elementary school students, told the tribal council in April.

At Ray Taken Alive’s urging, the Standing Rock Sioux Tribal Council took the rare and severe step of banishing a nonprofit organization from the tribe’s land. On May 3 [2022], the tribal council voted nearly unanimously to banish the Lakota Language Consortium – along with its co-founder Wilhelm Meya and its head linguist, Jan Ullrich – from setting foot on the reservation. What the council took into consideration wasn’t just the organization’s dealings with the Standing Rock Sioux; it turned out at least three other tribes had also raised concerns about Meya, saying he broke agreements over how to use recordings, language materials and historical records, or used them without permission.

Native Americans have been mined for financial benefit and academic accolades for centuries. Information collected on Native Americans has rarely been taken with their consent or been used to serve their communities, whether through research done on Indigenous remains robbed from gravesites or on blood samples used without permission.

This work has been lucrative for Meya, who started the Lakota Language Consortium in Indiana in the early 2000s. He’s also the CEO of The Language Conservancy, a nonprofit organization he founded soon afterward that works to revitalize other Indigenous languages.

In tax filings for 2020, Meya reported an annual salary of about \$210,000 from his two nonprofit groups, according to tax disclosure documents. That kind

of money bothers some in the Native American communities he's worked in; on the Standing Rock reservation, the median income is just over \$40,000.

Meya's organizations have received more than \$3.5 million in federal grants over the past 15 years for language revitalization projects with tribes across the country, records show. The Department of Health and Human Services alone has paid the Lakota Language Consortium nearly \$1 million to create some of the textbooks the organization sells for \$40 to \$50 apiece.

Several Indigenous academics, legal experts and tribal leaders say the consortium is asserting control over more than the teaching materials it makes; it's the community-specific information and tribal history that's contained within the books. Some of the words and phrases in the consortium's materials have never been recorded or transcribed before, and charging a marginalized community any fee for them is unethical, the experts said.

Ray Taken Alive and a growing number of tribal citizens believe all the dictionaries, textbooks and recordings should be free and accessible to the Indigenous communities that created the languages the products teach.

Estimates vary, but there are slightly more than 100 Native American languages still spoken today, less than half of what existed before European colonization began. Whether through the destructive violence of Manifest Destiny or the assimilation efforts of the Indian boarding school era, the U.S. campaign to eliminate Native American languages has been highly effective. Most of those that remain are in danger of extinction. Many tribes, especially smaller ones with fewer resources, rely on non-Native organizations to preserve their languages.

A common trait of Native American cultures is to hold things like land, resources and knowledge communally. That runs into conflict with U.S. copyright laws, which allow companies and nonprofit organizations to commoditize their work product – including pieces of a shared language.

Makalika Naholowa'a, a Native Hawai'ian attorney and the executive director at the Native Hawai'ian Legal Corporation, said when organizations that trade in Indigenous data don't freely share that information with the communities they gather it from, they are akin to miners or loggers, taking a valuable resource and selling it to whoever wants it. "Data is the new oil," she said.

Ray Taken Alive started learning Lakota as a kid by listening to his grandmother Delores Taken Alive, who was a first-language speaker. She grew up in South Dakota, where her family had lived since long before their land was part of the United States. Delores was proud to have been given her Lakota

name, Hínhán Sná Wín, or Rattling Owl Woman, by her great-grandmother, who survived the massacre at Wounded Knee. As a child, when Delores was drifting off to sleep, she listened to her parents and grandparents tell stories in Lakota, and that's how she learned the history of her people.

With the number of Lakota first-language speakers dwindling, Delores was eager to help preserve and transmit the language. Beginning in 2005, she recorded words and stories for Jan Ullrich, the linguist, and reviewed new entries in the Lakota Language Consortium's dictionary. She signed an agreement with the consortium that paid elders up to \$50 per hour, in exchange for exclusive rights to publish what they shared.

After his grandmother died from Covid in 2020 at age 86, Taken Alive said he asked the consortium for her recordings. That's when he learned the organization retained the "unrestricted permission to copyright" and publish them, according to the agreement she signed.

While the consortium eventually gave Taken Alive copies of his grandmother's tapes, he said that was the moment he was awoken to something bigger: the extent of the consortium's control over decades of information collected from the Standing Rock Sioux Tribe. His tribe had helped fund the consortium's effort and supported grants for it, according to tribal leaders, so he believed the Lakota people should have access to what came from it.

Meya began working with Ullrich, who is now the head linguist at the Lakota Language Consortium, in 2002. Ullrich grew up in the Czech Republic, and in the 1980s he joined a group of white hobbyists who appropriated Indigenous culture by dressing up as Native Americans, living in tipis and smoking peace pipes, which was captured in a [1995 documentary entitled *Becoming a Native American in the Czech Republic*](#).

—[Lakota elders helped a white man preserve their language. Then he tried to sell it back to them.](#), by Graham Lee Brewer of NBC News, 3 June 2022

deployment

deployment

This fleet needs to be operated around the world.

How many forward deployment locations are needed to cover the world?

Arafura Sea, Arctic Ocean, North Atlantic Ocean, South Atlantic Ocean, Bab el-Mandeb Strait (including Suez Canal), Baltic Sea, Bering Strait, Black Sea (including Turkish Straits), Cape of Good Hope, Caribbean Sea (including Panama Canal), South China Sea, Dover Strait, Drake Passage (Mar de Hoces), Hawai'i, Indian Ocean (including Diego Garcia), Sea of Japan (East Sea), Mediterranean Sea (including Strait of Gibraltar and Turkish Straits), Norwegian Sea, North Pacific Ocean, South Pacific Ocean, Strait of Hormuz, and Strait of Malacca.

That is a total of 22 forward deployed ships, which means at least 44 total ships, preferably 66 total ships. 50 ships might be a reasonable goal.

The US Navy currently has 11 nuclear-powered super carriers (10 Nimitz and 1 Ford) and plans to build 9 more Fords.

It is likely that the US funding for armored ships will only be in the range of four (4) to twelve (12).

Note that the Russians created the *Kiev*-class heavy aviation cruiser (Тяжелые авианесущие крейсеры) rather than a normal aircraft carrier because this designation allowed the ships to transit the Turkish Straits, while the 1936 Montreux Convention prohibited aircraft carriers heavier than 15,000 tons from passing through the Straits.

Native National Guard

Native National Guard

These large armored ships will constitute a fleet owned and operated by Native American nations. Individual ships may have solo missions or be integrated into various groups (such as task forces, strike group, battle group, or other combination) with other Native National Guard vessels or integrated into various groups with regular U.S. Navy vessels.

The U.S. military was originally divided into the Navy and the Army (with the Marines being part of the Navy). This structure was based on the military structures of major European powers and was used by the Continental Army (USA, 14 June 1775) and Continental Navy (USN, 10 November 1775) and was included in the U.S. Constitution. The Marine Corps (USMC) was created 13 October 1775 (predating the Navy it was designed to support). The Coast Guard is the oldest maritime force under the U.S. Constitution (USCG, 4 August 1790), predating the Navy Department by eight years. The United States Public Health Service Commissioned Corps (PHSCC), headed by the Surgeon General of the United States, was created 4 January 1889. The National Oceanic and Atmospheric Administration Commissioned Officer Corp (NOAA Corps) was created 22 May 1917. The Air Force was later created from the Army Air Corps (USAF, 18 September 1947). The recent Space Force was created (20 December 2019) mostly from the Air Force, but includes components formerly in the Navy and Army as well.

Reserve components of the United States Armed Forces are all members of the military who serve in a reserve capacity. The National Guard is an additional reserve military component of the Army and Air Force, respectively, and is composed of National Guard units, which operate

under Title 32 and under state authority as the Army National Guard and Air National Guard. The militia that later became the National Guard was first formed in the Colony of Virginia in 1607 and is the oldest uniformed military force founded in the New World. The National Guard can also be mobilized by the President to operate under Federal authority through Title 10. When acting under federal direction, the National Guard is managed by the National Guard Bureau, which is a joint Army and Air Force activity under the Department of Defense, with a 4-star general from the Army or Air Force appointed as its top leader. However, in Federal service command and control of National Guard organizations will fall under the designated Geographic or Functional Combatant Commander. The National Guard of the United States serves as a reserve component for both the Army and the Air Force and can be called up for federal active duty in times of war or national emergencies.

PHS and NOAA consist of commissioned officers only and have no warrant officer ranks or enlisted ranks. Commissioned officers of the PHS and NOAA may be militarized by the President. Because they are commissioned officers, they can be classified as prisoners of war under the Geneva Conventions, if captured by a belligerent entity. The United States Coast and Geodetic Survey (USC&GS), a predecessor to NOAA, originally began commissioning its officers so that if captured while engaged in battlefield surveying, they would be protected under the Law of Armed Conflict and could not be tried or executed as spies. The USC&GS Commissioned Officer Corps became the Environmental Science Services Administration Corps (ESSA Corps), upon the creation of the Environmental Science Services Administration (ESSA) on 13 July 1965, then became the NOAA Corps upon the creation of NOAA on 3 October 1970. The PHS traces its origins to a system of marine hospitals created by “An Act for the relief of sick and disabled seamen”, passed by Congress in 1798; it adopted a military model of organization in 1871.

Similarly, the Native National Guard would require legislation passed by Congress and the governments of each Native American nation.

It is my proposal that the complicated multi-service approach (which has repeatedly led to serious losses in combat because of breakdowns in communications or interservice competition) be discarded and the new Native National Guard be under a single unified command.

list of nations

list of nations

Federally Recognized Tribes

Alabama

- Poarch Band of Creeks

Alaska

- Native Village of Afognak (formerly the Village of Afognak)
- Agdaagux Tribe of King Cove
- Native Village of Akhiok
- Akiachak Native Community
- Akiak Native Community
- Native Village of Akutan
- Village of Alakanuk
- Alatna Village
- Native Village of Aleknagik
- Algaaciq Native Village (St. Mary's)
- Allakaket Village
- Native Village of Ambler
- Village of Anaktuvuk Pass
- Yupiit of Andreafski
- Angoon Community Association
- Village of Aniak
- Anvik Village
- Arctic Village (See Native Village of Venetie Tribal Government)
- Asa'carsarmiut Tribe
- Native Village of Atka

- Village of Atmautluak
- Atqasuk Village (Atkasook)
- Native Village of Barrow Inupiat Traditional Government
- Beaver Village
- Native Village of Belkofski
- Village of Bill Moore's Slough
- Birch Creek Tribe
- Native Village of Brevig Mission
- Native Village of Buckland
- Native Village of Cantwell
- Native Village of Chenega (aka Chanega)
- Chalkyitsik Village
- Cheesh-Na Tribe (formerly the Native Village of Chistochina)
- Village of Chefnak
- Chevak Native Village
- Chickaloon Native Village
- Chignik Bay Tribal Council (formerly the Native Village of Chignik)
- Native Village of Chignik Lagoon
- Chignik Lake Village
- Chilkat Indian Village (Klukwan)
- Chilkoot Indian Association (Haines)
- Chinik Eskimo Community (Golovin)
- Native Village of Chitina
- Native Village of Chuathbaluk (Russian Mission, Kuskokwim)
- Chuloonawick Native Village
- Circle Native Community
- Village of Clarks Point
- Native Village of Council
- Craig Community Association
- Village of Crooked Creek
- Curyung Tribal Council
- Native Village of Deering
- Native Village of Diomedea (aka Inalik)
- Village of Dot Lake
- Douglas Indian Association
- Native Village of Eagle
- Native Village of Eek
- Egegik Village
- Eklutna Native Village
- Native Village of Ekuk
- Ekwok Village
- Native Village of Elim
- Emmonak Village

Evansville Village (aka Bettles Field)

- Native Village of Eyak (Cordova)
- Native Village of False Pass
- Native Village of Fort Yukon
- Native Village of Gakona
- Galena Village (aka Loudon Village)
- Native Village of Gambell
- Native Village of Georgetown
- Native Village of Goodnews Bay
- Organized Village of Grayling (aka Holikachuk)
- Gulkana Village
- Native Village of Hamilton
- Healy Lake Village
- Holy Cross Village
- Hoonah Indian Association
- Native Village of Hooper Bay
- Hughes Village
- Huslia Village
- Hydaburg Cooperative Association
- Igiugig Village
- Village of Iliamna
- Inupiat Community of the Arctic Slope
- Iqurmit Traditional Council (formerly the Native Village of Russian Mission)
- Ivanoff Bay Village
- Kaguyak Village
- Organized Village of Kake
- Kaktovik Village (aka Barter Island)
- Village of Kalskag
- Village of Kaltag
- Native Village of Kanatak
- Native Village of Karluk
- Organized Village of Kasaan
- Kasigluk Traditional Elders Council (formerly the Native Village of Kasigluk)
- Kenaitze Indian Tribe
- Ketchikan Indian Corporation
- Native Village of Kiana
- King Island Native Community
- King Salmon Tribe
- Native Village of Kipnuk
- Native Village of Kivalina
- Klawock Cooperative Association
- Native Village of Kluti Kaah (aka Copper Center)
- Knik Tribe

Native Village of Kobuk

- Kokhanok Village
- Native Village of Kongiganak
- Village of Kotlik
- Native Village of Kotzebue
- Native Village of Koyuk
- Koyukuk Native Village
- Organized Village of Kwethluk
- Native Village of Kwigillingok
- Native Village of Kwinhagak (aka Quinhagak)
- Native Village of Larsen Bay
- Levelock Village
- Lime Village
- Village of Lower Kalskag
- Manley Hot Springs Village
- Manokotak Village
- Native Village of Marshall (aka Fortuna Ledge)
- Native Village of Mary's Igloo
- McGrath Native Village
- Native Village of Mekoryuk
- Mentasta Traditional Council
- Metlakatla Indian Community, Annette Island Reserve
- Native Village of Minto
- Naknek Native Village
- Native Village of Nanwalek (aka English Bay)
- Native Village of Napaimute
- Native Village of Napakiak
- Native Village of Napaskiak
- Native Village of Nelson Lagoon
- Nenana Native Association
- New Koliganek Village Council
- New Stuyahok Village
- Newhalen Village
- Newtok Village
- Native Village of Nightmute
- Nikolai Village
- Native Village of Nikolski
- Ninilchik Village
- Native Village of Noatak
- Nome Eskimo Community
- Nondalton Village
- Noorvik Native Community
- Northway Village

Native Village of Nuiqsut (aka Nooiksut)

- Nulato Village
- Nunakauyarmiut Tribe (formerly the Native Village of Toksook Bay)
- Native Village of Nunam Iqua (formerly the Native Village of Sheldon's Point)
- Native Village of Nunapitchuk
- Village of Ohogamiut
- Village of Old Harbor
- Orutsararmuit Native Village (aka Bethel)
- Oscarville Traditional Village
- Native Village of Ouzinkie
- Native Village of Paimiut
- Pauloff Harbor Village
- Pedro Bay Village
- Native Village of Perryville
- Petersburg Indian Association
- Native Village of Pilot Point
- Pilot Station Traditional Village
- Native Village of Pitka's Point
- Platinum Traditional Village
- Native Village of Point Hope
- Native Village of Point Lay
- Native Village of Port Graham
- Native Village of Port Heiden
- Native Village of Port Lions
- Portage Creek Village (aka Ohgsenakale)
- Pribilof Islands Aleut Communities of St. Paul & St. George Islands
- Qagan Tayagungin Tribe of Sand Point Village
- Qawalangin Tribe of Unalaska
- Rampart Village
- Village of Red Devil
- Native Village of Ruby
- Saint George Island (See Pribilof Islands Aleut Communities of St. Paul & St. George Islands)
- Native Village of Saint Michael
- Saint Paul Island (See Pribilof Islands Aleut Communities of St. Paul & St. George Islands)
- Village of Salamatoff
- Native Village of Savoonga
- Organized Village of Saxman
- Native Village of Scammon Bay
- Native Village of Selawik
- Seldovia Village Tribe
- Shageluk Native Village

- Native Village of Shaktoolik
- Native Village of Shishmaref
- Native Village of Shungnak
- Sitka Tribe of Alaska
- Skagway Village
- Village of Sleetmute
- Village of Solomon
- South Naknek Village
- Stebbins Community Association
- Native Village of Stevens
- Village of Stony River
- Sun'aq Tribe of Kodiak (formerly the Shoonaq' Tribe of Kodiak)
- Takotna Village
- Native Village of Tanacross
- Native Village of Tanana
- Tangirnaq Native Village (formerly Lesnoi Village)
- Native Village of Tatitlek
- Native Village of Tazlina
- Telida Village
- Native Village of Teller
- Native Village of Tetlin
- Central Council of the Tlingit & Haida Indian Tribes
- Traditional Village of Togiak
- Tuluksak Native Community
- Native Village of Tuntutuliak
- Native Village of Tununak
- Twin Hills Village
- Native Village of Tyonek
- Ugashik Village
- Umkumiute Native Village
- Native Village of Unalakleet
- Native Village of Unga
- Village of Venetie (See Native Village of Venetie Tribal Government)
- Native Village of Venetie Tribal Government (Arctic Village and Village of Venetie)
- Village of Wainwright
- Native Village of Wales
- Native Village of White Mountain
- Wrangell Cooperative Association
- Yakutat Tlingit Tribe

Arizona

- Ak Chin Indian Community of the Maricopa (Ak Chin) Indian Reservation
- Cocopah Tribe of Arizona

- Colorado River Indian Tribes of the Colorado River Indian Reservation (Arizona and California)
- Fort McDowell Yavapai Nation
- Fort Mojave Indian Tribe (Arizona, California and Nevada)
- Gila River Indian Community of the Gila River Indian Reservation
- Havasupai Tribe of the Havasupai Reservation
- Hopi Tribe of Arizona
- Hualapai Indian Tribe of the Hualapai Indian Reservation
- Kaibab Band of Paiute Indians of the Kaibab Indian Reservation
- Navajo Nation (Arizona, New Mexico and Utah)
- Pascua Yaqui Tribe of Arizona
- Quechan Tribe of the Fort Yuma Indian Reservation (Arizona and California)
- Salt River Pima-Maricopa Indian Community of the Salt River Reservation
- San Carlos Apache Tribe of the San Carlos Reservation
- San Juan Southern Paiute Tribe of Arizona
- Tohono O'odham Nation of Arizona
- Tonto Apache Tribe of Arizona
- White Mountain Apache Tribe of the Fort Apache Reservation
- Yavapai-Apache Nation of the Camp Verde Indian Reservation
- Yavapai-Prescott Indian Tribe

California

- Agua Caliente Band of Cahuilla Indians of the Agua Caliente Indian Reservation
- Alturas Indian Rancheria
- Augustine Band of Cahuilla Indians
- Bear River Band of the Rohnerville Rancheria
- Berry Creek Rancheria of Maidu Indians of California
- Big Lagoon Rancheria
- Big Pine Band Paiute Tribe of the Owens Valley
- Big Sandy Rancheria of Western Mono Indians of California
- Big Valley Band of Pomo Indians of the Big Valley Rancheria
- Bishop Paiute Tribe (previously listed as Paiute-Shoshone Indians of the Bishop Community of the Bishop Colony)
- Blue Lake Rancheria
- Bridgeport Indian Colony
- Buena Vista Rancheria of Me-Wuk Indians of California
- Cabazon Band of Mission Indians
- Cachil DeHe Band of Wintun Indians of the Colusa Indian Community of the Colusa Rancheria
- Cahuilla Band of Mission Indians of the Cahuilla Reservation
- Cahto Indian Tribe of the Laytonville Rancheria
- California Valley Miwok Tribe
- Campo Band of Diegueño Mission Indians of the Campo Indian Reservation

- Capitan Grande Band of Diegueño Mission Indians of California:Barona Group of Capitan Grande Band of Mission Indians of the Barona Reservation;Viejas (Baron Long) Group of Capitan Grande Band of Mission Indians of the Viejas Reservation
- Cedarville Rancheria
- Chemehuevi Indian Tribe of the Chemehuevi Reservation
- Cher-Ae Heights Indian Community of the Trinidad Rancheria
- Chicken Ranch Rancheria of Me-Wuk Indians of California
- Cloverdale Rancheria of Pomo Indians of California
- Cold Springs Rancheria of Mono Indians of California
- Colorado River Indian Tribes of the Colorado River Indian Reservation (Arizona and California)
- Cortina Indian Rancheria of Wintun Indians of California
- Coyote Valley Band of Pomo Indians of California
- Death Valley Timbi-Sha Shoshone Tribe
- Dry Creek Rancheria of Pomo Indians
- Elem Indian Colony of Pomo Indians of the Sulphur Bank Rancheria
- Elk Valley Rancheria
- Enterprise Rancheria of Maidu Indians of California
- Ewiiapaayp Band of Kumeyaay Indians
- Federated Indians of Graton Rancheria
- Fort Bidwell Indian Community of the Fort Bidwell Reservation of California
- Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation
- Fort Mojave Indian Tribe (Arizona, California and Nevada)
- Greenville Rancheria
- Grindstone Indian Rancheria of Wintun-Wailaki Indians of California
- Guidiville Rancheria of California
- Habematolel Pomo of Upper Lake
- Hoopa Valley Tribe
- Hopland Band of Pomo Indians
- Inaja Band of Diegueño Mission Indians of the Inaja and Cosmit Reservation
- Ione Band of Miwok Indians of California
- Jackson Band of Miwuk Indians
- Jamul Indian Village of California
- Karuk Tribe
- Kashia Band of Pomo Indians of the Stewart's Point Rancheria
- Koi Nation of Northern California
- La Jolla Band of Luiseño Indians
- La Posta Band of Diegueño Mission Indians of the La Posta Indian Reservation
- Lone Pine Paiute-Shoshone Tribe
- Los Coyotes Band of Cahuilla & Cupeno Indians
- Lytton Rancheria of California
- Manchester Band of Pomo Indians of the Manchester Rancheria

- Manzanita Band of Diegueño Mission Indians of the Manzanita Reservation
- Mechoopda Indian Tribe of Chico Rancheria
- Mesa Grande Band of Diegueño Mission Indians of the Mesa Grande Reservation
- Middletown Rancheria of Pomo Indians of California
- Mooretown Rancheria of Maidu Indians of California
- Morongo Band of Cahuilla Mission Indians
- Northfork Rancheria of Mono Indians of California
- Pala Band of Luiseño Mission Indians of the Pala Reservation
- Paskenta Band of Nomlaki Indians of California
- Pauma Band of Luiseño Mission Indians of the Pauma & Yuima Reservation
- Pechanga Band of Luiseño Mission Indians of the Pechanga Reservation
- Picayune Rancheria of Chukchansi Indians of California
- Pinoleville Pomo Nation (formerly the Pinoleville Rancheria of Pomo Indians of California)
- Pit River Tribe (includes XL Ranch, Big Bend, Likely, Lookout, Montgomery Creek and Roaring Creek Rancherias)
- Potter Valley Tribe (formerly the Potter Valley Rancheria of Pomo Indians of California)
- Quartz Valley Indian Community of the Quartz Valley Reservation of California
- Quechan Tribe of the Fort Yuma Indian Reservation (Arizona and California)
- Ramona Band of Cahuilla
- Redding Rancheria
- Redwood Valley or Little River Band of Pomo Indians of the Redwood Valley Rancheria California
- Resighini Rancheria
- Rincon Band of Luiseño Mission Indians of the Rincon Reservation
- Robinson Rancheria
- Round Valley Indian Tribes, Round Valley Reservation
- San Manuel Band of Serrano Mission Indians of the San Manuel Reservation
- San Pasqual Band of Diegueño Mission Indians of California
- Santa Rosa Indian Community of the Santa Rosa Rancheria
- Santa Rosa Band of Cahuilla Indians (formerly the Santa Rosa Band of Cahuilla Mission Indians of the Santa Rosa Reservation)
- Santa Ynez Band of Chumash Mission Indians of the Santa Ynez Reservation
- Lipay Nation of Santa Ysabel (Previously listed as the Santa Ysabel Band of Diegueño Mission Indians of the Santa Ysabel Reservation)
- Scotts Valley Band of Pomo Indians of California
- Sheep Ranch Rancheria of Me-Wuk Indians
- Sherwood Valley Rancheria of Pomo Indians of California
- Shingle Springs Band of Miwok Indians, Shingle Springs Rancheria (Verona Tract)
- Soboba Band of Luiseño Indians
- Susanville Indian Rancheria
- Sycuan Band of the Kumeyaay Nation (formerly the Sycuan Band of Diegueno Mission

Indians of California)

- Table Mountain Rancheria of California
- Tejon Indian Tribe
- Tolowa Dee-ni' Nation
- Torres-Martinez Desert Cahuilla Indians
- Tule River Indian Tribe of the Tule River Reservation
- Tuolumne Band of Me-Wuk Indians of the Tuolumne Rancheria of California
- Twenty-Nine Palms Band of Mission Indians of California
- United Auburn Indian Community of the Auburn Rancheria of California
- Upper Lake Band of Pomo Indians
- Utu Utu Gwaitu Paiute Tribe of the Benton Paiute Reservation
- Washoe Tribe (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community and Washoe Ranches) (California and Nevada)
- Wilton Rancheria
- Wiyot Tribe (formerly the Table Bluff Reservation-Wiyot Tribe)
- Yocha Dehe Wintun Nation
- Yurok Tribe of the Yurok Reservation

Colorado

- Southern Ute Indian Tribe of the Southern Ute Reservation
- Ute Mountain Tribe of the Ute Mountain Reservation (Colorado, New Mexico and Utah)

Connecticut

- Mashantucket Pequot Tribe
- Mohegan Tribe of Indians of Connecticut

Florida

- Miccosukee Tribe of Indians of Florida
- Seminole Tribe of Florida (Dania, Big Cypress, Brighton, Hollywood and Tampa Reservations)

Idaho

- Coeur D'Alene Tribe
- Kootenai Tribe of Idaho
- Nez Perce Tribe
- Shoshone-Bannock Tribes of the Fort Hall Reservation of Idaho

Indiana

- Pokagon Band of Potawatomi Indians (Michigan and Indiana)

Iowa

- Sac & Fox Tribe of the Mississippi in Iowa

Kansas

- Iowa Tribe of Kansas and Nebraska
- Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas
- Prairie Band Potawatomi Nation
- Sac & Fox Nation of Missouri (Kansas and Nebraska)

Louisiana

- Chitimacha Tribe of Louisiana
- Coushatta Tribe of Louisiana
- Jena Band of Choctaw Indians
- Tunica-Biloxi Indian Tribe of Louisiana

Maine

- Aroostook Band of Micmac Indians
- Houlton Band of Maliseet Indians
- Passamaquoddy Tribe
- Penobscot Nation

Massachusetts

- Mashpee Wampanoag Tribe
- Wampanoag Tribe of Gay Head (Aquinnah) of Massachusetts

Michigan

- Bay Mills Indian Community
- Grand Traverse Band of Ottawa and Chippewa Indians
- Hannahville Indian Community
- Nottawaseppi Huron Band of the Potawatomi
- Keweenaw Bay Indian Community
- Lac Vieux Desert Band of Lake Superior Chippewa Indians of Michigan
- Little River Band of Ottawa Indians
- Little Traverse Bay Bands of Odawa Indians
- Match-e-be-nash-she-wish Band of Pottawatomi Indians of Michigan
- Pokagon Band of Potawatomi Indians (Michigan and Indiana)
- Saginaw Chippewa Indian Tribe of Michigan
- Sault Ste. Marie Tribe of Chippewa Indians of Michigan

Minnesota

Lower Sioux Indian Community in the State of Minnesota

- Mdewakanton Sioux Indians
- Minnesota Chippewa Tribe (Six component reservations: Bois Forte Band (Nett Lake); Fond du Lac Band; Grand Portage Band; Leech Lake Band; Mille Lacs Ban; White Earth Band)
- Prairie Island Indian Community in the State of Minnesota
- Mdewakanton Sioux Indians
- Red Lake Band of Chippewa Indians
- Shakopee Mdewakanton Sioux Community of Minnesota
- Upper Sioux Community

Mississippi

- Mississippi Band of Choctaw Indians

Montana

- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Chippewa-Cree Indians of the Rocky Boy's Reservation
- Confederated Salish and Kootenai Tribes of the Flathead Reservation
- Crow Tribe of Montana
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Little Shell
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation

Nebraska

- Iowa Tribe of Kansas and Nebraska
- Omaha Tribe of Nebraska
- Ponca Tribe of Nebraska
- Sac & Fox Nation of Missouri (Kansas and Nebraska)
- Santee Sioux Nation
- Winnebago Tribe of Nebraska

Nevada

- Confederated Tribes of the Goshute Reservation (Nevada and Utah)
- Duckwater Shoshone Tribe of the Duckwater Reservation
- Ely Shoshone Tribe of Nevada
- Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation (Nevada and Oregon)
- Fort Mojave Indian Tribe (Arizona, California and Nevada)
- Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony
- Lovelock Paiute Tribe of the Lovelock Indian Colony

- Moapa Band of Paiute Indians of the Moapa River Indian Reservation
- Paiute-Shoshone Tribe of the Fallon Reservation and Colony
- Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation
- Reno-Sparks Indian Colony
- Shoshone-Paiute Tribes of the Duck Valley Reservation
- Summit Lake Paiute Tribe of Nevada
- Te-Moak Tribe of Western Shoshone Indians of Nevada (Four constituent bands: Battle Mountain Band; Elko Band; South Fork Band; Wells Band)
- Walker River Paiute Tribe of the Walker River Reservation
- Washoe Tribe (Nevada and California) (Carson Colony, Dresslerville Colony, Woodfords Community, Stewart Community and Washoe Ranches)
- Winnemucca Indian Colony of Nevada
- Yerington Paiute Tribe of the Yerington Colony & Campbell Ranch
- Yomba Shoshone Tribe of the Yomba Reservation

New Mexico

- Jicarilla Apache Nation
- Mescalero Apache Tribe of the Mescalero Reservation
- Navajo Nation (Arizona, New Mexico and Utah)
- Ohkay Owingeh (formerly the Pueblo of San Juan)
- Pueblo of Acoma
- Pueblo of Cochiti
- Pueblo of Jemez
- Pueblo of Isleta
- Pueblo of Laguna
- Pueblo of Nambe
- Pueblo of Picuris
- Pueblo of Pojoaque
- Pueblo of San Felipe
- Pueblo of San Ildefonso
- Pueblo of Sandia
- Pueblo of Santa Ana
- Pueblo of Santa Clara
- Kewa Pueblo
- Pueblo of Taos
- Pueblo of Tesuque
- Pueblo of Zia
- Ute Mountain Tribe of the Ute Mountain Reservation (Colorado, New Mexico and Utah)
- Zuni Tribe of the Zuni Reservation

New York

- Cayuga Nation

Oneida Nation of New York

- Onondaga Nation
- Saint Regis Mohawk Tribe (formerly the St. Regis Band of Mohawk Indians of New York)
- Seneca Nation of Indians
- Shinnecock Indian Nation
- Tonawanda Band of Seneca
- Tuscarora Nation of New York

North Carolina

- Eastern Band of Cherokee Indians

North Dakota

- Spirit Lake Tribe
- Standing Rock Sioux Tribe (North Dakota and South Dakota)
- Three Affiliated Tribes of the Fort Berthold Reservation
- Turtle Mountain Band of Chippewa Indians of North Dakota

Oklahoma

- Absentee-Shawnee Tribe of Indians
- Alabama-Quassarte Tribal Town
- Apache Tribe of Oklahoma
- Caddo Nation of Oklahoma
- Cherokee Nation
- Cheyenne and Arapaho Tribes
- Citizen Potawatomi Nation
- Comanche Nation
- Delaware Nation
- Delaware Tribe of Indians
- Eastern Shawnee Tribe of Oklahoma
- Fort Sill Apache Tribe of Oklahoma
- Iowa Tribe of Oklahoma
- Kaw Nation
- Kialegee Tribal Town
- Kickapoo Tribe of Oklahoma
- Kiowa Indian Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Modoc Tribe of Oklahoma
- Muscogee (Creek) Nation
- Ottawa Tribe of Oklahoma
- Otoe-Missouria Tribe of Indians
- Pawnee Nation of Oklahoma

- Peoria Tribe of Indians of Oklahoma
- Ponca Tribe of Indians of Oklahoma
- Quapaw Tribe of Indians
- Sac & Fox Nation
- Seminole Nation of Oklahoma
- Seneca-Cayuga Nation
- Shawnee Tribe
 - The Chickasaw Nation
 - The Choctaw Nation of Oklahoma
 - The Osage Nation
- Thlopthlocco Tribal Town
- Tonkawa Tribe of Indians of Oklahoma
- United Keetoowah Band of Cherokee Indians in Oklahoma
- Wichita and Affiliated Tribes (Wichita, Keechi, Waco and Tawakonie)
- Wyandotte Nation

Oregon

- Burns Paiute Tribe
- Confederated Tribes of the Coos, Lower Umpqua and Siuslaw Indians of Oregon
- Confederated Tribes of the Grand Ronde Community of Oregon
- Confederated Tribes of the Siletz Reservation
- Confederated Tribes of the Umatilla Indian Reservation
- Confederated Tribes of the Warm Springs Reservation of Oregon
- Coquille Indian Tribe
- Cow Creek Band of Umpqua Tribe of Indians
- Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation (Nevada and Oregon)
- Klamath Tribes

Rhode Island

- Narragansett Indian Tribe

South Carolina

- Catawba Indian Nation (Catawba Tribe of South Carolina)

South Dakota

- Cheyenne River Sioux Tribe of the Cheyenne River Reservation
- Crow Creek Sioux Tribe of the Crow Creek Reservation
- Flandreau Santee Sioux Tribe of South Dakota
- Lower Brule Sioux Tribe of the Lower Brule Reservation
- Oglala Sioux Tribe (previously listed as Oglala Sioux Tribe of the Pine Ridge)

Reservation)

- Rosebud Sioux Tribe of the Rosebud Indian Reservation
- Sisseton-Wahpeton Oyate of the Lake Traverse Reservation
- Standing Rock Sioux Tribe (North Dakota and South Dakota)
- Yankton Sioux Tribe of South Dakota

Texas

- Alabama-Coushatta Tribe of Texas
- Kickapoo Traditional Tribe of Texas
- Ysleta Del Sur Pueblo

Utah

- Confederated Tribes of the Goshute Reservation (Nevada and Utah)
- Navajo Nation (Arizona, New Mexico and Utah)
- Northwestern Band of Shoshoni Nation
- Paiute Indian Tribe of Utah (Cedar Band of Paiutes, Kanosh Band of Paiutes, Koosharem Band of Paiutes, Indian Peaks Band of Paiutes, and Shivwits Band of Paiutes)
- Skull Valley Band of Goshute Indians of Utah
- Ute Indian Tribe of the Uintah and Ouray Reservation
- Ute Mountain Ute Tribe (Colorado, New Mexico and Utah)

Virginia

- Pamunkey Indian Tribe
- Chickahominy Indian Tribe
- Chickahominy Indian Tribe-Eastern Division
- Upper Mattaponi Tribe
- Rappahannock Tribe, Inc.
- Monacan Indian Nation
- Nansemond Indian Tribe

Washington

- Confederated Tribes of the Chehalis Reservation
- Confederated Tribes of the Colville Reservation
- Confederated Tribes and Bands of the Yakama Nation
- Cowlitz Indian Tribe
- Hoh Indian Tribe
- Jamestown S'Klallam Tribe
- Kalispel Indian Community of the Kalispel Reservation
- Lower Elwha Tribal Community
- Lummi Tribe of the Lummi Reservation
- Makah Indian Tribe of the Makah Indian Reservation

- Muckleshoot Indian Tribe
- Nisqually Indian Tribe
- Nooksack Indian Tribe of Washington
- Port Gamble S'Klallam Tribe
- Puyallup Tribe of the Puyallup Reservation
- Quileute Tribe of the Quileute Reservation
- Quinault Indian Nation
- Samish Indian Nation
- Sauk-Suiattle Indian Tribe of Washington
- Shoalwater Bay Indian Tribe of the Shoalwater Bay Indian Reservation
- Skokomish Indian Tribe
- Snoqualmie Indian Tribe
- Spokane Tribe of the Spokane Reservation
- Squaxin Island Tribe of the Squaxin Island Reservation
- Stillaguamish Tribe of Indians of Washington
- Suquamish Indian Tribe of the Port Madison Reservation
- Swinomish Indian Tribal Community
- Tulalip Tribes of Washington
- Upper Skagit Indian Tribe of Washington

Wisconsin

- Bad River Band of the Lake Superior Tribe of Chippewa Indians of the Bad River Reservation
- Forest County Potawatomi Community
- Ho-Chunk Nation of Wisconsin
- Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin
- Lac du Flambeau Band of Lake Superior Chippewa Indians of the Lac du Flambeau Reservation of Wisconsin
- Menominee Indian Tribe of Wisconsin
- Oneida Tribe of Indians of Wisconsin
- Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
- St. Croix Chippewa Indians of Wisconsin
- Sokaogon Chippewa Community
- Stockbridge Munsee Community

Wyoming

- Arapaho Tribe of the Wind River Reservation
- Shoshone Tribe of the Wind River Reservation

State Recognized Tribes

State tribal recognition for the states below specifically refers to states that have created a

formal process for recognition. Please note, some states, even if they have not established a formal process for recognition acknowledge the historical and cultural contribution of tribes, however they are not captured in this list.

Alabama

- Cher-O-Creek Intra Tribal Indians
- Cherokee Tribe of Northeast Alabama
- Cherokees of Southeast Alabama
- Echota Cherokee Tribe of Alabama
- Ma-Chis Lower Creek Indian Tribe of Alabama
- Mowa Band of Choctaw Indians
- Piqua Shawnee Tribe
- Southeastern Mvskoke Nation
- United Cherokee Ani-Yun-Wiya Nation

Connecticut

- Eastern Pequot Tribal Nation
- The Golden Hill Paugussett
- Schaghticoke Tribal Nation

Delaware

- Lenape Indian Tribe of Delaware
- Nanticoke Indian Tribe

Georgia

- Cherokee of Georgia Tribal Council
- Georgia Tribe of Eastern Cherokee
- Lower Muskogee Creek Tribe

Louisiana

- Addai Caddo Tribe
- Biloxi-Chitimacha Confederation of Muskogee
- Choctaw-Apache Community of Ebarb
- Clifton Choctaw
- Four Winds Tribe Louisiana Cherokee Confederacy
- Grand Caillou/Dulac Band
- Isle de Jean Charles Band
- Louisiana Choctaw Tribe
- Natchitoches Tribe of Louisiana
- Pointe-Au-Chien Indian Tribe
- United Houma Nation

Maryland

- Piscataway Indian Nation
- Piscataway Conoy Tribe

Massachusetts

- Nipmuc Nation

New Jersey

- Nanticoke Lenni-Lenape Tribal Nation
- Ramapough Lenape Nation
- The Powhatan Renape Nation

New York

- Tonawada Band of Seneca
- Tuscarora Nation
- Unkechaug Nation

North Carolina

- Cohaire Intra-Tribal Council, Inc.
- Haliwa-Saponi Indian Tribe
- Lumbee Tribe
- Meherrin Nation
- Occaneechi Band of the Saponi Nation
- Sappony
- Waccamaw-Siouan Tribe

South Carolina

- Beaver Creek Indians
- Edisto Natchez Kusso Tribe of South Carolina
- Pee Dee Indian Nation of Upper South Carolina
- Pee Dee Indian Tribe of South Carolina
- Santee Indian Organization
- The Waccamaw Indian People
- Wassamasaw Tribe of Varnertown Indians

Vermont

- Elnu Abenaki Tribe
- Nulhegan Band of the Coosuk Abenaki Nation

Koasek Abenaki Tribe

- Mississquoi Abenaki Tribe

Virginia

- Cheroenhaka (Nottoway)
- Chickahominy Tribe
- Eastern Chickahominy Tribe
- Mattaponi
- Monacan Nation
- Nansemond
- Nottoway of Virginia
- Pamunkey
- Pattawomeck
- Rappahannock
- Upper Mattaponi Tribe

Hawai'i

- Kingdom of Hawai'i

Note that the Kingdom of Hawai'i is *not* officially recognized by the federal or state government.

governance

governance

I propose a unified Native National Guard shared jointly by all Native American and Native Hawai'ian nations together, as well individual Native National Guards for each nation.

The Native National Guard needs to be governed by the 574 Native American nations and the Kingdom of Hawai'i. That implies (but does not require) a treaty between the 574 Native American nations and the Kingdom of Hawai'i and a subsequent system for the 574 Native American nations and the Kingdom of Hawai'i to govern over the Native National Guard. The 574 Native American nations and the Kingdom of Hawai'i can figure out how to govern the Native National Guard.

A Native National Guard would require legislation passed by Congress, the governments of each of the 574 Native American nations and the government of the Kingdom of Hawai'i.

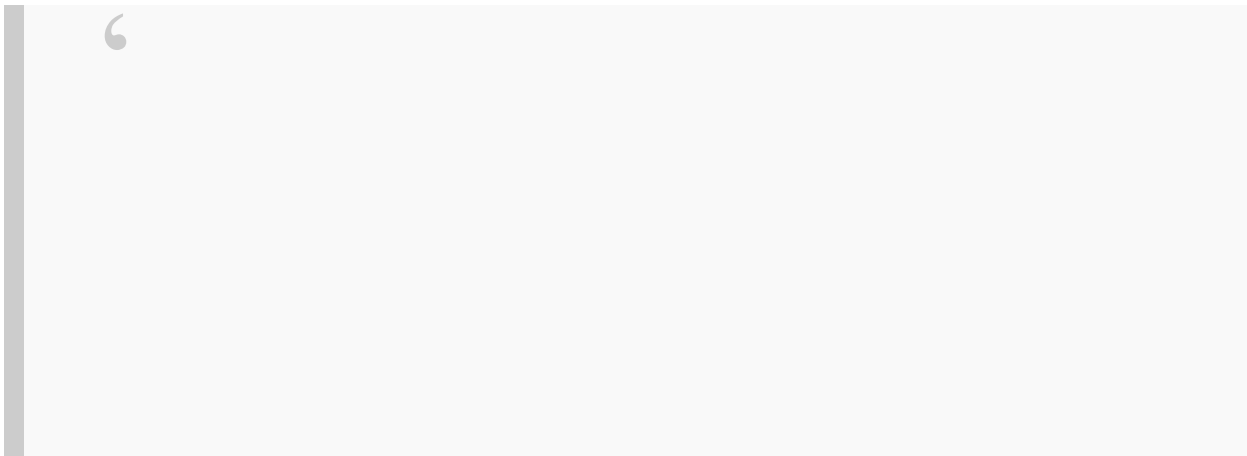
main headquarters

main headquarters

The fleet and additional infrastructure of the Native National Guard needs a command structure, which implies at least one major headquarters.

It is my recommendation that the main headquarters be constructed deep inside a mountain in Colorado similar to the existing Cheyenne Mountain Complex. If there is enough space beside the existing Cheyenne Mountain Complex for a second large complex, the two could be connected for better coordination.

➤ From [Cheyenne Mountain Complex](#), Wikipedia:





Cheyenne Mountain Complex

U.S. Air Force

The Cheyenne Mountain Complex is located at Cheyenne Mountain Air Force Station (CMAFS), a short distance from NORAD and USNORTHCOM headquarters at Peterson Air Force Base in Colorado Springs, Colorado. Cheyenne Mountain Air Force Station falls under Air Force Space Command and hosts the activities of several tenant units.

At the height of the Cold War in the late 1950s, the idea of a hardened command and control center was conceptualized as a defense against long-range Soviet bombers. The Army Corps of Engineers supervised the excavation of Cheyenne Mountain and the construction of an operational center within the granite mountain. The Cheyenne Mountain facility became fully operational as the NORAD Combat Operations Center on Feb. 6, 1967.

Over the years, the installation came to house elements of the North American Aerospace Defense Command (NORAD), U.S. Strategic Command, U.S. Air Force Space Command and U.S. Northern Command (USNORTHCOM). Under what became known as the Cheyenne Mountain Operations Center (CMOC), several centers supported the NORAD missions of aerospace warning and aerospace control and provided warning of ballistic missile or air attacks against North America.

NORAD's focus and facilities have both evolved to meet the asymmetric threats of the 21st century. On July 28, 2006, the Cheyenne Mountain

Directorate was re-designated as the Cheyenne Mountain Division, with the mission to assist in establishing an integrated NORAD and USNORTHCOM Command Center within the headquarters building at Peterson Air Force Base.



Cheyenne Mountain Complex

U.S. Air Force

On the fiftieth anniversary of the NORAD agreement—May 12, 2008—the Command Center located within Cheyenne Mountain Complex was officially re-designated as the NORAD and USNORTHCOM Alternate Command Center. The Cheyenne Mountain Division of NORAD and USNORTHCOM was re-designated as the J36 branch within the NORAD and USNORTHCOM's Operations Directorates.

Cheyenne Mountain Air Force Station is owned and operated by Air Force Space Command. In fact, NORAD and USNORTHCOM use just under 30% of the floor space within the complex and comprise approximately 5% of the daily population at Cheyenne Mountain.

Today, the Cheyenne Mountain Complex serves as NORAD and USNORTHCOM's Alternate Command Center and as a training site for crew qualification. Day-to-day crew operations for NORAD and USNORTHCOM typically take place at Peterson Air Force Base.

—[Cheyenne Mountain Complex](#), *Wikipedia*

command structure

command structure

The fleet and additional infrastructure of the Native National Guard needs a command structure.

The command structure can initially be based on that of major world militaries.

military ranks

The U.S. military ranks, in particular the separation between officers and enlisted, is based on the Medieval European separation between nobility and commoners.

There is no good reason to perpetuate that system.

There are four obvious layers of ranks: (1) new recruits, (2) low level combat veterans and skilled technicians, (3) middle management, and (4) upper management.

Existing army and navy terminology can be used to provide the names of ranks for the Native National Guard.

doctrine

doctrine

Doctrine needs to be established. Initially it can be based on the examples of major world militaries.

training

training

While National Guards have access to regular U.S. military training programs, I recommend two customized basic training programs.

I recommend a full training program for front-line military personnel and alternative training program (including customized training for those who can't meet normal military standards, such as the elderly and the handicapped) for those who will be located at bases and ports for support roles.

I propose that all Native Americans and Native Hawai'ians (regardless of age or current education) be eligible for membership in the Native National Guard. Nobody would be forced to join.

This would provide Native Americans and Native Hawai'ians with pay for a weekend drill each month and a two week annual training period (usually during the summer).

This would provide Native Americans and Native Hawai'ians with useful training, including possibly some high tech training, depending on each individual's military occupational specialty.

For the full training, I recommend four phases.

As previously stated, it my proposal to have a single unified service rather than the eight different uniformed services used by the United States.

That means Phase I of the Basic Training needs to combine the training of all eight uniformed services and will make it longer than any of the regular military basic training.

Phase I would be a combination of the basic trainings of the Army, Navy, Marine Corps, Air Force, Space Force, and Coast Guard. The U.S. use of several separate military services is based on out-dated European military structures of the 1700s which were in turn based on medieval militaries. This produces numerous inefficiencies and rivalries. It makes more sense to have one

common basic training and have the flexibility for personnel to be assigned where needed.

If the proposed vessel has supercavitation, then Phase II would be similar to the U.S. Navy Basic Enlisted Submarine School ((BESS) covering fire fighting, damage control, and submarine escape.

Phase III would be the Basic Airborne Course (BAC), either at Fort Benning, Georgia, or at the Native National Guard training bases. The proposed program would include helicopter rappel training.

Phase IV would include the combined police, fire, and paramedic (or EMS) training. Sunnyvale, California, Department of Public Safety created a Public Safety Office which combines police, fire, and EMS. Sunnyvale DPS can send out its personnel to flexibly respond to police, fire, and medical emergencies. There are substantial problems with the Sunnyvale DPS's implementation of the training, but the underlying idea is still useful. Military police training would supplement civilian police training. It is important to solve the problem of racism, bigotry, and violence that currently infects U.S. police forces.

I also recommend modified support training programs so those with various disabilities can be in the Native National Guard in support roles and those who object to war can be members with no combat roles. This would allow every Native American who is interested to become a member of the Native National Guard and receive drill pay (for two weeks of training per year and one weekend per month), access to military training programs, and other benefits.

The support basic training should be flexible enough that anyone, even those with physical or mental disabilities, can be trained for useful support roles.

“Is skill useful for raw recruits? Clearly the answer is yes. And clearly a basic level of training for your troops is useful. There are no real negatives to training your troops how to be more effective with their weapons. And preferably more effective than the enemy are. The Romans were completely professional troops, most of them anyway. They devoted a lot of time to training their men to use their weapons. They got them better at throwing their pilums. They got them better at handling their shields. They got them better at using their swords. They had a methodology for training. If we look at modern militaries, this is usually the case. However, we do find there is a trade-off. For example, in the modern world, many militaries still have bayonets, but many modern militaries have basically stopped doing bayonet training.” —Matt Easton [Is Personal Skill Important for Armies in War?](#)

Marine Receiving Week

After taking the oath, moved to Recruit Receiving. Given an opportunity to call home and let family know about safe arrival.

New recruits searched for contraband and issued basic uniforms, toiletries, and letter writing supplies. Surrender all civilian possessions (even underwear) for storage.

Given a haircut. Men shaved bald and women close-cropped.

Fill out lots of paperwork, undergo medical and dental screening, receive vaccines.

Inisital Strength Test (1½-mile run, pull-ups, crunches [sit-ups] — a scaled down version of the Marine Physical Fitness Test).



New recruits of Bravo Company, 1st Recruit Training Battalion, receive a Uniform Code of Military Justice brief at Marine Corps Recruit Depot San Diego. At this point, recruits are informed of the articles of the UCMJ that apply to them while they are in recruit training. Photo By Cpl. Angelica I.

Annastas

Marine Black Friday

New recruits meet the drill sergeants.

Recruits are formed into boot camp platoons.



Recruits from Alpha Company, 1st Recruit Training Battalion, receive instructions from a drill instructor during pick up at Marine Corps Recruit Depot San Diego. The recruits will spend their first day with their drill instructors learning the rules and regulations of recruit training, regarding everything from how to act in the squad bay to how to speak to drill instructors. Photo By: Lance Cpl. Kailey J. Maraglia



“Army Week 01: As you adjust to Army life, you begin to learn the importance of Army Values and learn how they shape you as a Soldier. You will take your first diagnostic Army Physical Fitness Test, learn how to march and prepare your barracks for inspection. You will practice Drill and Ceremony, learn your Special and General Orders and the Military Justice System. You will also learn how to disassemble, reassemble, clean and sight your M-16A2 rifle. This knowledge provides you the foundation for good soldiering” —[U.S Army Basic Training](#)

Marine Training Week 1

Issued a M16A4 rifle and learn the Rifelman's Creed.

Practice disassembly, cleaning, assembly, and drill with rifle until handling becomes second nature.

Run everywhere. Sound off until voice is hoarse.

Practice march and drill in formation.

Daily physical training, including calisthenics (pull-ups, pushups, mountain climbers) and running in platoon formation with a cadence call.

Classroom training on first aid, Marine Corps history, and Marine Corps values of honor, courage, and commitment.

On Friday, introduction to the obstacle course. Walk through each obstacle before running the entire course with the platoon.

Marine Corps Martial Arts Program (MCMAP). A combination of karate strikes, jiu jitsu, and bayonet fighting.

Saturday the first Combat Fitness Test, which includes basic physical combat skills such as sprinting, fireman's carry, and handling heavy ammo cans.



U.S. Marine Staff Sgt. Jeremy Bolanos, drill master, 1st Recruit Training Battalion, Recruit Training Regiment, Marine Corps Recruit Depot Parris Island, demonstrates a drill movement to recruits aboard Marine Corps Recruit Depot, Parris Island, S.C., May 13, 2014. Drill is used throughout recruit training to instill good order and discipline. (U.S. Marine Corps photo by Cpl. Aneshea S. Yee/Released)

“Navy Training Week 1 (Processing Week)

There's a good chance that your most stressful week of Basic Training is Processing Week. Paperwork is completed, bank accounts are opened (if necessary), prescription glasses are

provided, sleeping quarters are assigned, physical and dental exams are given, instructors are introduced, and clothing is issued.

Male recruits in processing have their hair cut very short. Accordingly, men's hair length is often seen by other recruits as a measure of tenure.

Other Week 1 activities include swim qualifications, marching, classroom learning and intensive physical conditioning.” —[U.S Navy Basic Training Brochure](#)



“**Army Week 02:** You’ll be taught unarmed combat skills, learn first aid, map reading, and land navigation. Your confidence will be put to the test at Victory Tower—where you’ll rappel from a 30-foot platform. You’ll learn the Army value of Loyalty and the importance of teamwork.” —[U.S Army Basic Training](#)

Marine Training Week 2

Additional physical training and MCMAP. 4x400 meter intervals added to the physical training.

Pugil stick fighting.

Close order drill (builds unit cohesiveness and discipline).

Classroom instruction this week includes Combat Care and Marine Corps History.



Private Joseph A. Pratt, Alpha Company, 1st Recruit Training Battalion, waits for his turn to climb an obstacle during the Crucible at Marine Corps Base

Camp Pendleton, Calif. Photo By: Lance Cpl. Angelica I. Annastas

“Navy Training Week 2

You’ll take your first academic test during this week. Then comes the confidence course, where you will work with a team to simulate a shipboard emergency. Together, you’ll pass through small passages in full gear, toss life rings, and put on firefighting equipment.” —[U.S Navy Basic Training Brochure](#)



“**Army Week 03:** You will be introduced to the bayonet and basic bayonet movemnets. You’ll become even more familiar with your M-16A2 rifle as you practice basic rifle marksmanship fundamentals. You’ll learn to defend yourself from chemical attack and continue to improve your fitness through Physical Training. Through examples of the Army’s history, you will learn another Army value’Duty.” —[U.S Army Basic Training](#)

“Bayonets are pretty damned easy to be effective with. They are essentially a spear, although they are obviously heavier and shorter than a spear because they are attached to a firearm. ... I think the bayonet is a relatively easy thing to use.” —Matt Easton [Is Personal Skill Important for Armies in War?](#)

“For example, in the modern world, many militaries still have bayonets, but many modern militaries have basically stopped doing bayonet training. Most, all they do, is just get their people to fix bayonets, charge a position, and stab a sandbag block three times while screaming. If we rewind to World War I, we see they were doing all of that, and they had a higher level of bayonet training, because they were actually teaching people how to basically fence with their bayonets. They were teaching them how to parry another bayonet plus they were teaching them how to oppose swords, how to oppose cavalry, how to use the butt of the rifle, all sorts of slightly more complex techniques. It was essentially fencing. And not only did they train them on the theory, they actually fenced with them. They had fencing muskets as they were known. They had trainers with plunger bayonets on the end and they wore big heavy versions of fencing masks and padded jackets and groin protection, and they actually fenced. They actually fought. Not only did they fight against other people with bayonets, they fought in groups, they fought against people with swords, they fought against people on horseback with lances and swords. So, they really trained it. Today people don't because it is now seen as not a worthwhile use of time because there are other things you could be doing with that time. I would argue that bayonet training is something that still a little more time should be spent on because not only does it teach you how to use a weapon you are issued more effectively but in addition to that it teaches you other things as well. It teaches you aggression, it teaches you how to be a physical person, to get into a rough and tumble and take position at point blank range, at knife range basically. And it still happens in the modern world. I have friends who have used bayonets. It happens. It doesn't get spoken about a lot in newspapers and one of the most common ways bayonets are used in the modern world are for crowd control, I'm afraid. In an environment where you are not supposed to be shooting people, because they're not enemies, but they are nevertheless causing a problem, fixing bayonets happens. I think the military should be having more hand to hand training than they do, and that involves bayonets and knives.” —Matt Easton [Is Personal Skill Important for Armies in War?](#)

Marine Training Week 3

Confidence Course. Includes A-frame and ladder to heaven.

Physical training includes the circuit course, running 2x400 sprints, strength exercises, and calisthenics.

Military ID card issued. Fill out paperwork.

Dentist visit.

Friday includes a strength and endurance run as a unit. 800-meter run (1/2 mile) with strength stations in between. Squats, mountain climbers, pull-ups, ammo can lifts, and push-ups.

Saturday is the Initial Drill Competition. Senior drill instructors will evaluate both the trainees and their drill instructors.



U.S. Marine Corps Drillmaster Staff Sgt. Ryan Guinty inspects recruits with Platoon 1057, Bravo Company, 1st Recruit Battalion during an initial drill evaluation June 25, 2018, on Parris Island, S.C. Drill instructors are evaluated on their appearance, sword control and cadence during the evaluation. Bravo Company is scheduled to graduate August 24, 2018. Parris Island has been the site of Marine Corps recruit training since Nov. 1, 1915. Today, approximately 19,000 recruits come to Parris Island annually for the chance to become United States Marines by enduring 13 weeks of rigorous, transformative training. Parris Island is home to entry-level enlisted training for approximately 49 percent of male recruits and 100 percent of female recruits in the Marine Corps. (U.S. Marine Corps photo by Sgt. Dana Beesley/Released)

“Navy Training Week 3

Now your hands-on training takes center stage. You’ll learn knot-tying and first aid techniques and get further physical training.” —[U.S Navy Basic Training Brochure](#)

Marine Training Week 4

First week who are underperforming can be dropped to another training platoon. A drop is typically a two-week setback.

Swim week. After morning PT there will be training in a pool. Those who don’t know how to swim will be taught.

Water Survival Basic Qualification requires swimming 50 yards with a ruck sack and treading water in cammies for 15 minutes.

Friday is MCMAP and pugil stick fighting.

Friday is also boot camp photos.

Saturday is the first Physical Fitness Test of 3-mile run, 2 minutes of pull-ups, and 2 minutes

of crunches.

Saturday is obstacle course.



Recruits of Bravo Company, 1st Recruit Training Battalion, make their way across the pool during the a 25-meter swim portion of the Water Survival

Basic Qualification at Marine Corps Recruit Depot San Diego. Photo By: Sgt. Benjamin E. Woodle

“Navy Training Week 4

Here you’ll perform additional exercises in preparation for your first Physical Training Test, which measures performance in sit-and-reach, curl-ups, push-ups, running, swimming and flexibility. You’ll also have firearms training, and you’ll take your second academic test.” —[U.S Navy Basic Training Brochure](#)



“**Army Week 04:** This week emphasizes the Army value of Respect. You respect your

fellow Soldiers and your accomplishments as a team. You continue to practice basic rifle marksmanship fundamentals and learn multiple target detection. Your physical strength is put to the test as you take your second diagnostic Army Physical Fitness Test, demonstrating how much better you have become.” —[U.S Army Basic Training](#)

Marine Training Week 5

Team Week and Interior Guard.

Physical training includes log drills.

Strength and Endurance runs get longer and tougher.

Fitted for dress uniforms.

Team Week is a break from standard training. Recruits perform various jobs around the depot, including maintaining a 24-hour guard at sensitive installations and operating the barracks like a patrol base.

At the end of the week the first Combat Fitness Test. While in camouflage utilities a recruit must sprint 800 yards, lift a 30 pound ammo can from shoulder height to overhead as many times as possible in two minutes, and perform a timed shuttle run called maneuver under fire, and perform the fireman's carry.

“Navy Training Week 5

This is when you'll receive antiterrorism and firefighting instruction, as well as computer training and mentoring. Plus, there's a glimpse of the light at the end of the tunnel — yearbook photos are taken!” —[U.S Navy Basic Training Brochure](#)



“Army Week 05: It's time for you to qualify on your M-16A2 rifle, and when you successfully complete the exercise, you'll be awarded a badge as Marksman, Sharpshooter, or Expert. You'll learn the Army value of Selfless Service and how Soldiers have continuously given of themselves throughout the U.S. Army's history.” —[U.S Army Basic Training](#)

Marine Training Week 6

Physical Fitness Test, bayonet assault course, pugil stick fighting, and martial arts training.

Written test on Marine Corps Customs, Courtesies, and Traditions.

Weapons Field Training Battalion.

Close Combat skills and master marksmanship training.

“Navy Training Week 6

You'll participate in more drills, more physical exercise and instruction on damage control and firefighting. You'll also take your final academic test.” —[U.S Navy Basic Training Brochure](#)



“**Army Week 06:** You'll take your third diagnostic Army Physical Fitness Test and become familiar with a variety of U.S. weapons. You'll learn tactical movement techniques, and as a member of a team, you'll participate in a defensive live-fire exercise. You'll also learn the meaning of the Army value of Honor.” —[U.S Army Basic Training](#)

Marine Training Week 7

Grass week.

Basic rifle positions, how bullets work, and snapping (holding shooting positions and practicing trigger pulls without ammunition.

Hikes become tougher.

Week ends with 8 km hike with body armor, rifle, kevlar helmet, and heavy pack.



Recruits of Golf Company, 2nd Recruit Training Battalion, push through adversity to carry an ammunition can during the resupply hike at Edson Range, Marine Corps Base Camp Pendleton. The ammunition resupply hike is six kilometers and recruits take turns carrying various size ammunition cans filled with dirt simulating the weight of the rounds. Photo By: Cpl. Tyler Viglione

“Navy Training Week 7

This week is more classroom learning and skills training, culminating in the pinnacle event of Basic Training: Battle Stations. Battle Stations incorporates all the skills you’ve learned in the previous six weeks. This 12-hour simulation gives hands-on testing of your proficiency in swimming, survival, teamwork, firefighting, damage control, rescue, and more — all in a high-stress environment.” —[U.S Navy Basic Training Brochure](#)



“**Army Week 07:** Your physical training will pay off as you take your final Army Physical Fitness Test. You’re in the best shape of your life and passing the test is no problem. You’ll learn another Army value ‘Integrity’ and know the Army Values that have been instilled in you to this point will help you overcome the challenges of the Confidence Course.” —[U.S Army Basic Training](#)

Marine Training Week 8

Live fire.

Three days of live fire and two days of qualification.

At the end of each day on the rifle range, forced march of 3, 5, and 8 miles with pack, flak jacket, helmet, and weapon.

Rifle qualification: Begin at 500-yard line and move closer (like encountering an enemy). 10 shots at 500 yards.

10 shots at 300-yard line.

10 shots at 200-yard line.

Fire from a barricaded position wearing flak and kevlar the entire time.

Saturday 13 km hike.



“Army Week 08: You’ll learn the meaning of Personal Courage, the final Army value. Your soldiering skills are tested during the Warrior Field Training Exercise. All your training comes into focus and you perform each task flawlessly. You’re almost finished with training, and you’re gaining more confidence and skill every day.” —[U.S Army Basic Training](#)

“Navy Training Week 8

Having passed Battle Stations, you’ll spend the next week getting ready for graduation, which is called Pass-In-Review. Along with additional classroom studies and physical training, you will learn about career advancement and other details required for success as a full-fledged Sailor.

Pass-In-Review is your Basic Training graduation ceremony. Your family is invited to attend this very proud moment.

You may spend the following weekend on “Liberty” before embarking on the next stage of your career as a bona fide Navy Sailor.” —[U.S Navy Basic Training Brochure](#)

Marine Training Week 9

Field courses: comnat assault, low crawl, barbed wire.

More combat scenarios firing rifles.



“Army Week 09: You have been empowered by your training, and you are ready to contribute your skill to the team—the U.S. Army. You prepare for graduation with a new sense of purpose. The seven core Army Values are now an integral part of your life. On graduation day, you feel a sense of pride you have never felt before. Your parents, relatives, and friends will feel it too. You are a Soldier in the Army of One.” —[U.S Army Basic Training](#)

Marine Training Week 10

Monday final written test on history, customs, and courtesies, and rank structure.

Tuesday Confidence Chamber (gas chamber). Proper use of gas masks.

Crucible: 54-hour event with sleep deprivation, operating on a 24-hour operations schedule, limited food (two and a half Meals Ready to Eat [MREs] for the entire event) completing team-building tasks in squads, more than 45 miles of endurance marching.

Awarded Eagle, Globe, and Anchor and officially a United States Marine.

Ends with Warrior Breakfast where new Marines can eat as much as anything in the chow hall they want.



Marines with Lima Company, 3rd Recruit Training Battalion, receive the Eagle, Globe, and Anchor after completing the Crucible on Marine Corps Recruit Depot Parris Island, S.C., Sept. 22, 2018. The Crucible is a 54-hour culminating event that requires recruits to work as a team and overcome challenges in order to earn the title United States Marine. (U.S. Marine Corps photo by Lance Cpl. Yamil Casarreal)

Marine Training Week 11

Marine Week.

MCMAP, Physical training, and classroom instruction.

Defensive driving course.

Four hours at attention for Company Commander's inspection.

Marine Training Week 12

Monday: Graduation practice.

Tuesday: Classroom instruction on history and tradition of the Marine Corps.

Wednesday: Battalion Commander's inspection. Weapons cleaned and turned in for last time.

Thursday: morning moto-run and family day.

Friday: graduation followed by weekend liberty with family before next assignment.

Basic Enlisted Submarine School

If the proposed vessel has supercavitation, then Phase II would be similar to the U.S. Navy Basic Enlisted Submarine School ((BESS) covering fire fighting, damage control, and submarine escape.

Located on Naval Submarine Base New London (NAVSUBASE NLON) in Groton, New London County, Connecticut, the school is an eight-week introduction to the basic theory, construction and operation of nuclear-powered submarines.

Basic Airborne Course (BAC)

Phase III would be the Basic Airborne Course (BAC), either at Fort Benning, Georgia, or at the Native National Guard training bases. The proposed program would include helicopter rappel training.

This three-week course, also known as Basic Airborne Course, teaches Soldiers the techniques involved in parachuting from airplanes and landing safely.

Police, Fire, and EMS

Phase IV would include the combined police, fire, and paramedic (or EMS) training. Sunnyvale, California, Department of Public Safety created a Public Safety Office which combines police, fire, and EMS. Sunnyvale DPS can send out its personnel to flexibly respond to police, fire, and medical emergencies. There are substantial problems with the Sunnyvale DPS's implementation of the training, but the underlying idea is still useful. Military police training would supplement civilian police training. It is important to solve the problem of racism, bigotry, and violence that currently infects U.S. police forces.

The Sunnyvale Department of Public Safety Police Academy includes 20 weeks of in-field police training. The US Army Military Police Basic Officer Leader Course is 17 weeks.

The proposed training will *not* use the training of the Sunnyvale Department of Public Safety. Their training materials explicitly refer to "Doper Houses" and "combat leadership", and one fifth of one of their courses is about the Battle of Ramadi in the Iraq War and discusses police tactics and responses to "insurgent occupation".

It is important for those assigned to military roles to know things that are military related, such as handling Prisoners of War (POWs), but the militarization of civilian police forces serves no useful purpose. The members of the Native National Guard will need to be taught both

civilian and military policing, and understand when each is appropriate. Ideally, the members of the Native National Guard should be able to serve as first responders on Native American reservations.

The idea of being able to respond to a wide variety of public safety needs is sound. The implementation by the Sunnyvale Department of Public Safety is filled with bigotry and the worst of modern police attitudes against the civilian public.

“Job training for military police requires 20 weeks of One Station Unit Training and on-the-job instruction in police methods. Part of this time is spent in the classroom, and part takes place in the field.” —[31B-MILITARY-POLICE](#)

“Some of the skills you’ll learn are: Basic warrior skills and use of firearms; Military/civil laws and jurisdiction; Investigating and collecting evidence; Traffic and crowd control; Arrest and restraint of suspects.” —[31B-MILITARY-POLICE](#)

“Advanced Individual Training: 9 weeks at Fort Leonard Wood, MO.” —[31B-MILITARY-POLICE](#)

“The Basic Military Police Training Division trains newly recruited Soldiers and Marines in basic and advanced MP skills utilizing the mock MP station, bar, strip mall and gymnasium. At the same time, the Advanced Law Enforcement Training Division is training nine different courses from special police operations to anti- terrorism and counterdrug. This portion of the village contains a tactical clearing complex for Special Reaction Team and Protective Service training, complete with a credit union, shoppette, health clinic, government quarters and several other buildings the team might encounter on a military base.” —[U.S. Army Military Police School](#)

“Each facility contains surveillance systems, inside and out, to record the training for immediate feedback to the students on what went right and what mistakes need to be corrected. The village also contains mock quarters for the student investigators to train on crime scene processing and child abuse prevention, as well as a mock confinement facility for training military police corrections specialists. TA 210 supports anti-terrorism evasive driving training for students ranging from DOD executive staff drivers to general officers and other select personnel. This facility supports the most realistic evasive driving training the Army has to offer.” —[U.S. Army Military Police School](#)

The Sunnyvale Department of Public Safety Fire Academy is 16 weeks.

The Sunnyvale Department of Public Safety EMS Academy is 7 weeks.

personnel

personnel

G-1 Personnel

The Office of the Deputy Chief of Staff for Personnel, Department of the Army, United States Army, also known as the G-1 is responsible for development, management and execution of all manpower and personnel plans, programs and policies throughout the entire U.S. Army. As the principal human relations of the U.S. Army, it is dedicated to supporting and empowering soldiers, civilian employees, military families and veterans worldwide in peace or war. As such the office oversees recruiting, retention and sustainment of a high quality volunteer force through innovative and effective training programs. The primary objective of the office is to ensure readiness of its personnel to serve the needs of the Army as a whole across the full spectrum of its operations.

intelligence

intelligence

G-2 Intelligence

G-2 refers to the military intelligence staff in the United States Army at the Divisional Level and above. The position is generally headed by a Brigadier General. It is contrasted with GĐ1 (personnel), GĐ3 (operations), GĐ4 (logistics) and G-5 (civil-military operations). These “G” sections have counterparts in other branches of the service, with the U.S. Navy using an NĐ designation, the U.S. Air Force using the A- designation, and the Joint Staff using the J- designation. It is the higher level function of the S-2 (intelligence) with the “S” signifying intelligence directorates at the battalion or brigade level.

operations

operations

G-3 Operations

Military operations is a concept and application of military science that involves planning the operations for the projected maneuvering forces' provisions, services, training, and administrative functions—to allow them to commence, insert, then egress from combat. The operations staff plays a major role in the projection of military forces in any wide spectrum of conflict; terrestrial, aerial, or naval warfare needed to achieve operational objectives in a theater of war.

The general staff of military operations deals with the planning, process, collection, and analyzing of information. Its major function is responsible in the allocating of resources and determining time requirements. It is combined with other military staff sections to achieve its primary principles in employment of military forces and materiel to meet specific missions.

logistics

logistics

G-4 Logistics

Large supply ships, even in convoys with escort destroyers and escort carriers, are highly vulnerable to being sunk.

- From [The Key to Winning a Modern War](#), by Not What You Think YouTube channel:

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The success of narco smugglers can be attributed to three things: redundancy, the use of multiple platforms, and geographical flexibility. These principles can be applied to wartime logistics.

Traffickers play a numbers game. By simply using a large number of vessels to smuggle narcotics. Even if 90% of those shipments are intercepted the margins are so high it will still be a profitable business.

—[The Key to Winning a Modern War](#), by Not What You Think YouTube channel

Narco smugglers run large numbers of fast, small vehicles to make sure that some of their drugs get through.

- From [The Key to Winning a Modern War](#), by Not What You Think YouTube channel:

The delivery platforms are expendable, meaning they are used for a one-way delivery of the cargo, after which they are deliberately sunk.

But smugglers also use a variety of platforms: go fast boats, narco subs, tunnels, narco torpedoes, and even full scale submarines. At one point aircraft were also used, but improved radar coverage in the southern United States border discourages delivery via aircraft.

In addition, traffickers use geography to their advantage. When trafficking at the southern border became more difficult, smugglers quickly shifted 80% of the volume from the U.S.-Mexico border to narco operations in the Caribbean. Meanwhile, law enforcement couldn't keep up with the swift change in strategy.

—[The Key to Winning a Modern War](#), by Not What You Think YouTube channel

The same principle can be used to guarantee successful supply of the main armored ships, any group of vessels they are in, and any air or land forces they are supporting.

➤ From [The Key to Winning a Modern War](#), by Not What You Think YouTube channel:

Large numbers of inexpensive platforms can be used for delivery. Enough of them should be sent out so that an adequate amount of supplies will actually get through.

Joint forces should be supplied by air, land, and sea, as opposed to a single platform, and go where the enemy is not, changing routes on a dime, and reorienting logistics force, and a need for an increase in the success rate by supplying faster than the adversary can react.

Another option is to take the idea of low profile boats from smugglers and modify them so that they can carry tens of tons of cargo thousands of miles to reach safe logistic hubs.

Low profile boats operate almost entirely submerged and only a small snorkel and cockpit visible. It would be a perfect candidate for an unmanned sea system that can travel slowly. Even if not all of them make it, scores of them

will deliver goods where they need to go.

—[The Key to Winning a Modern War](#), by Not What You Think YouTube channel

civil-military operations

civil-military operations

G-5 Civil-Military Interactions

information technology

information technology

G-6 Information Technology

education

education

Each base will need education facilities for the members of the Native National Guard and civilian employees, as well as for the families of each. These education facilities should be expanded to provide for the needs of the adjacent reservation.

This includes a service academy, with satellite schools at several Native American reservations.

“Native students hold the highest national dropout rate. Conditions on reservations leave schools severely underfunded and many children are unable to attend. This delay in education leaves early childhood skills undeveloped. According to Native Hope, “Simple skills that many 5-year-olds possess like holding a crayon, looking at a book and counting to 10 have not been developed.” Inadequate education is highly reflective of Native American graduation rates. Native students have a 30% dropout rate before graduating high school, which is twice the rate of the national average. This number is worse in universities — 75% to 93% of Native American students drop out before completing their degrees. Such disparity between Native American students and their colleagues has inspired the increase in scholarships for this community.” —[5 Facts About Life on the Native American Reservations](#) by the Borgen Project

This proposal includes plans for a new military service academy of equivalent quality to the United States Military Academy (USMA) in West Point, New York, (the first engineering school in the U.S., M.I.T. was second), the United States Naval Academy (USNA) in Annapolis, Maryland, the United States Coast Guard Academy (USCGA) in New London, Connecticut, the United States Merchant Marine Academy (USMMA) in Kings Point, New York, and the United States Air Force Academy (USAFA) in Colorado Springs, Colorado.

In addition to a main campus, it is proposed for there to be several satellite schools located in major Native American nations and the Kingdom of Hawai‘i.

common bases

common bases

The bases of the proposed Native National Guard can provide both jobs and direct civilian support to the 574 Native American nations and the Kingdom of Hawai'i.

I propose that each of the 574 Native American nations and the Kingdom of Hawai'i be given at least one base each, with multiple bases for the larger nations.

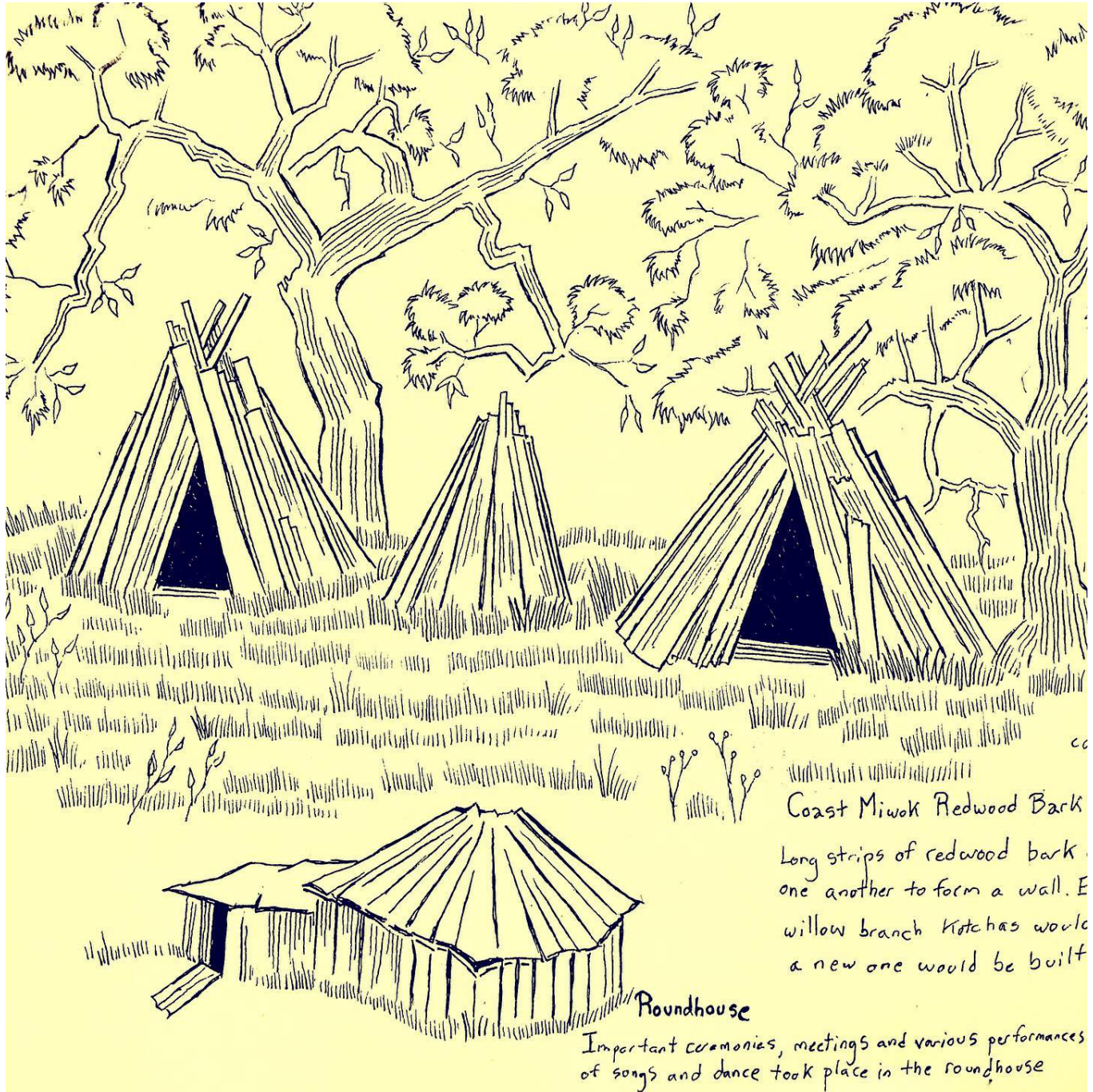
The first base for each Native American nation should be on land adjacent to a current reservation. In the cases where the Native American nation currently has no reservation, a new reservation is to be created. In the cases where multiple reservations are adjacent and/or additional new land is unavailable or presents other problems, a base will be built on a current reservation, with an additional base or port be created elsewhere.

Additionally, there should be one common base in each U.S. city with a population of 100,000 or more (326 in 2020), at least two common bases in each U.S. city with a population of 500,000 or more (37 in 2020), and a port in each of those cities that is located on the ocean, a major river, or a major lake. Each of these urban bases and ports should be operated by the combined Native National Guard governance.

The bases, ports, airfields, depots, and other facilities required to support the ships and the infrastructure of the Native National Guard should be built on land adjacent to existing reservations, adding to the sovereign native land, or on new land provided for those Native American nations that don't currently have a reservation. Key facilities, including the primary home ports for the armored ships, as well as maintenance and repair facilities, supply facilities, etc., would be on additional land provided the the U.S. govenrment that would be shared by the Native Americans and Native Hawai'ians collectively.

In addition to direct support of the fleet operated by the Native National Guard, the bases can provide jobs and substantial civilian support for all 574 Native American nations and the Kingdom of Hawai'i.

It is important for the bases to take into account Native American traditions, such as Navajo buildings having a front door facing east.



California Indian architecture of the Coast Miwok tribe (San Francisco Bay Area)

illustration by Dorian Yamelson



California Indian architecture of the Ohlone Tribe (San Francisco Bay Area)

illustration by Dorian Yamelson

shelters

The nation of Finland has underground bunkers sufficient to provide their entire population with housing, food, water, medical care, and other basic needs for months. This is Finland's response to the danger of nuclear war. Unlike the U.S., which has bunkers only for the top government officials and selected portions of the military, Finland intends to save their entire civilian population.

In addition to providing support for the armored vessels and providing needed civilian

services on the reservation, these bases should include the ability to protect Native Americans and Hawai'ians from nuclear war between major super powers.

housing

The bases needs to provide needed housing for the members of the Native National Guard, their families, civilian base workers, their families, and addtional housing should be constructed at the same time for other members of the Native American nations and the Kingdom of Hawai'i.

“Forty percent of on-reservation housing is considered substandard (compared to 6 percent outside of Indian Country) and nearly one-third of homes on reservations are overcrowded. Less than half of the homes on reservations are connected to public sewer systems, and 16 percent lack indoor plumbing.” —[Housing & Infrastructure](#) by National Congress of American Indians

➤ From [Reservation Living Conditions](#), (March 8, 2004, Indian Country Today) by A Program of Patnership with Native Americans:

There is a housing crisis in Indian country. Despite the Indian Housing Authority's (IHAs) recent efforts, the need for adequate housing on reservations remains acute. One legislator deplored the fact that “there are 90,000 homeless or underhoused Indian families, and that 30% of Indian housing is overcrowded and less than 50% of it is connected to a public sewer.”

[M]any American Indians are living in substandard housing. About 40% of on-reservation housing is considered inadequate (2003, U.S. Commission on Civil Rights). The waiting list for tribal housing is long; the wait is often three years or more, and overcrowding is inevitable. Most families will not turn away family members or anyone who needs a place to stay. It is not uncommon for 3 or more generations to live in a two-bedroom home with inadequate plumbing, kitchen facilities, cooling, and heating.

—[Reservation Living Conditions](#), (March 8, 2004, Indian Country Today) by A Program of Patnership with Native Americans

utilities

The bases need to provide essential utilities for base operations and the adjacent reservations. This includes power generation, drinking water distribution, sewage treatment and waste

disposal, telephone services, high speed internet service, and other basic utilities.

➤ From [Reservation Living Conditions](#), (March 8, 2004, Indian Country Today) by A Program of Patnership with Native Americans:

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Further increasing the concerns with reservation housing is the noticeable absence of utilities. While most Americans take running water, telephones, and electricity for granted, many reservation families live without these amenities. On a seriously stretched budget, utilities are viewed as luxuries compared to food and transportation. Overcrowding, substandard dwellings, and lack of utilities all increase the potential for health risk, especially in rural and remote areas where there is a lack of accessible healthcare.

—[Reservation Living Conditions](#), (March 8, 2004, Indian Country Today) by A Program of Patnership with Native Americans

power generation

water



Uranium, arsenic, and other metals contaminate Navajo Nation and Alaska Native wells.

Between 1944 and 1986, the U.S. federal government mined Navajo lands in Utah, New Mexico, and Arizona for 4 million tons of uranium. At the end of the Cold War, more than 500 mines were abandoned. Nearly all military-grade plutonium is made by humans from uranium. Plutonium oxide is mixed with uranium oxide to make mixed oxide or MOX fuel for nuclear reactors.

A 2016 study involving the Southwest research Information Center, Centers of Disease Control and Prevention, and various state and local groups, found 27 percent of Navajo have high levels of uranium in their urine (contrasted with less than 5 percent for the U.S. population as a whole). Cancer rates in the Navajo Nation doubled from the 1970s to the 1990s.

sewage treatment and waste disposal

Less than 50% of Native American housing is connected to a public sewer. — [Reservation Living Conditions](#) by A Program of Partnership with Native Americans

telephone

“In some areas, up to 50 percent of Native homes are without phone service.” —[Housing & Infrastructure](#) by National Congress of American Indians

internet

radio/television

health care

Military bases provide health care facilities.

The health care facilities needed for the base should be expanded to provide health care to the entire community.

“**Native Americans have the highest risk for health complications.** Across the board, Native American health is disproportionately worse than other racial groups in the United States. This population is 177% more likely to die of diabetes and 500% more likely to die from tuberculosis. Native Americans also have a 60% higher infant mortality rate when compared to Caucasians. Most Native American reservations rely on the Indian Health Service, a severely underfunded federal program that can only provide for approximately 60% of the needs of the insured. That does not account for a majority of those on the reservations. Only about 36% of Native Americans have private health care and one-third of the non-elderly remain uninsured.” —[5 Facts About Life on the Native American Reservations](#) by the Borgen Project

➤ From [Reservation Living Conditions](#), by A Program of Partnership with Native Americans:

“The average life expectancy for Native Americans has improved yet still trails that of other Americans by almost 5 years’ (2010, HHS Indian Health Disparities Fact Sheet). About 55% of American Indians rely on the Indian Health Service for medical care (2006, Indian Health Facts). Yet, the Indian Health Care Improvement Act only meets about 60% of their health needs (2003, U.S. Commission on Civil Rights).

Due to underfunding, Indian Health Service facilities are crisis-driven and leave a wide gap in adequate and preventative health care for many Native Americans on the reservations. Pharmacies and doctor’s offices outside of hospitals are completely non-existent in some communities.

—[Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans

air, rail, road, and water connections

Each base will need rail and roadway connections sufficient for rapid movement of military personnel and equipment. Most (if not all) of the bases will need at least a small airport and air traffic control. Bases adjacent to oceans, the Gulf of Mexico, navigable rivers, the Great Lakes, or other large bodies of water will need prts facilities for making water connections.

These same connections will be useful for the residences of the reservation as well.

education

Each base will need education facilities for the members of the Native National Guard and civilian employees, as well as for the families of each. These education facilities should be expanded to provide for the needs of the adjacent reservation.

➤ From [Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans:

Native students hold the highest national dropout rate. Conditions on reservations leave schools severely underfunded and many children are unable to attend. This delay in education leaves early childhood skills undeveloped. According to Native Hope, “Simple skills that many 5-year-olds possess like holding a crayon, looking at a book and counting to 10 have not been developed.” Inadequate education is highly reflective of Native American graduation rates. Native students have a 30% dropout rate before graduating high school, which is twice the rate of the national average. This number is worse in universities — 75% to 93% of Native American students drop out before completing their degrees. Such disparity between Native American students and their colleagues has inspired the increase in scholarships for this community.

—[Reservation Living Conditions](#), by A Program of Patnership with Natvie Americans

This proposal includes plans for a new military service academy of equivalent quality to the United States Military Academy (USMA) in West Point, New York, (the first engineering school in the U.S., M.I.T. was second), the United States Naval Academy (USNA) in Annapolis,

Maryland, the United States Coast Guard Academy (USCGA) in New London, Connecticut, the United States Merchant Marine Academy (USMMA) in Kings Point, New York, and the United States Air Force Academy (USAFA) in Colorado Springs, Colorado.

In addition to a main campus, it is proposed for there to be several satellite schools located in major Native American nations and the Kingdom of Hawai'i.

emergency services

Each base will need emergency services. These emergency services should also serve the adjacent reservation.

legal services

It is normal for military bases to provide free legal services through the Judge Advocate General Corps. These services should also be made available to the members of the Native American nations and the Kingdom of Hawai'i.

The Judge Advocate General Corps also provides the legal services needed by the base command. These services should also be made available to the governments of the corresponding Native American nations and the Kingdom of Hawai'i.

food

Each base will need to provide meals to those who work on the base. The capacity should be expanded to provide meals for the members of the reservation.

When possible, the food needed for the bases and the armored ships should be grown on reservations. Each Native American and Native Hawai'ian Native National Guard should be directly involved in food production, including construction and maintenance of irrigation, on reservations.

shopping

It is normal for military bases to have a commissary (for groceries) and a post exchange (for other goods) which provide service members and their families with substantial discounts compared to for-profit civilian stores.

In consultation with each Native American and Native Hawai'ian government (to prevent undue competition with existing tribal and tribe member services), these facilities or portions of these facilities should be made available to the members of the corresponding nations.

employment

In addition to direct support of the fleet operated by the Native National Guard, the bases can provide jobs and substantial civilian support for all 574 Native American nations and the Kingdom of Hawai'i.

Massive numbers of people will need to be employed to operate, maintain, and support the proposed Native National Guard fleet. Priority for jobs should first go to members of the 74 Native American nations and the Kingdom of Hawai'i, including providing needed education and training for Native Americans and Native Hawai'ians to fill these jobs.

“Native Americans are the most impoverished ethnic group in the United States.

According to a study done by Northwestern University, one-third of Native Americans live in poverty. The population has a median income of \$23,000 per year and 20% of households earn less than \$5,000 a year. Due to the oppression of Indigenous peoples, reservations cannot provide adequate economic opportunity. As a result, a majority of adults are unemployed.” —[5 Facts About Life on the Native American Reservations](#) by the Borgen Project

➤ From [Reservation Living Conditions](#), by A Program of Partnership with Native Americans:

Typically, Tribal and Federal governments are the largest employers on the reservations. Many households are overcrowded and earn only social security, disability or veteran's income. The scarcity of jobs and lack of economic opportunity mean that, depending on the reservation, four to eight out of ten adults on reservations are unemployed. Among American Indians who are employed, many are earning below poverty wages (2005 BIA American Indian Population & Labor Force Report).

The overall percentage of American Indians living below the federal poverty line is 28.2% (2008, American Indians Census Facts). The disparity for American Indians living below poverty on the reservations is even greater, reaching 38% to 63% in our service area (2006, National Center for Education Statistics, and other sources).

—[Reservation Living Conditions](#), by A Program of Partnership with Native Americans

technology

I propose standardized devices for computing, communications, and other needs. I further propose that every member of any of the 574 Native American nations and the Kingdom of

Hawai'i be issued their own personal copy of these devices.

Roman Castra

The castrum (plular is castra) of the Roman Republic and Roman Empire came in different sizes, but the plans were uniform for each size and related across sizes.

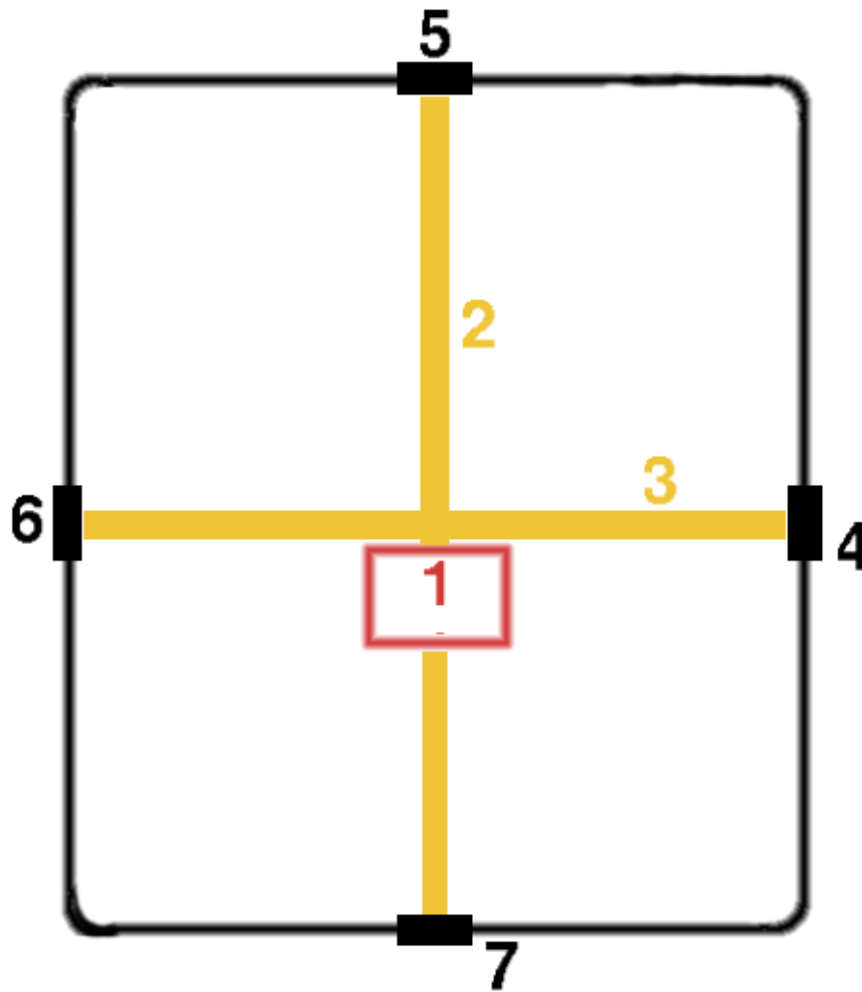
The center of Roman cities also shared a common plan.

The use of a common plan meant that a Roman soldier (or an entire unit) transferred to a new location already knew where everything was in the new camp because it was the same as the old camp or fortress.

You should see the significant advantages of that idea.

The most common kinds were the castra stativa (permanent camp/fortress), castra aestiva (summer camp/fortress), castra hiberna (winter camp/fortress), and castra navalia or castra nautica (navy camp/fortress).

The fortresses would be either squares or rectangles, depending on the number of troops assigned. The fortresses would have two main streets (bisecting the fortress into four smaller squares) with a central plaza. A gate through the fortress walls was located at the terminus of each of the two major roads.



lay-out of a Roman fort

- 1: Principia
- 2: Via Praetoria
- 3: Via Principalis
- 4: Porta Principalis Dextra
- 5: Porta Praetoria (main gate)
- 6: Porta Principalis Sinistra
- 7: Porta Decumana (back gate)

created by Matthias Kabel, licensed under [Creative Commons Attribution-Share Alike 3.0 Unported](#)

An open space (called the intervallum) was located just inside the fortress walls (called the vallum) to catch enemy missiles, provide an access route around the entire fortress (called the via sagularis), and possibly livestock such as cattle (capita, the source of the modern word capital).

The central portion was used for both a parade ground and headquarters area. The main headquarters building was called the praetorium, which housed the command (praetor, who could be a consul, proconsul, or officer of lesser rank). On one side was the quaestorium (the building of the supply officer, the quaestor) and on the other side was the forum (where public business

was conducted). The east-west road was called the via praetoria.

The main north-south street (called the via principalis or cardus maximus) was lined with the homes or tents of the tribunes, with the barracks of the soldiers the tribune commanded behind.

The canteen was the area from the southern main entrance to the unit numbered fifth, typically half way to the praetorium. This was marked by the via quintana or fifth street. This was the location of a public market and was as far as local civilians were allowed into the fortress. The barracks south of fifth street were typically occupied by auxillary or allied troops.



The reconstructed West gate at Arbeia Roman Fort in South Shields, near Newcastle upon Tyne

photography by Chris McKenna, licensed under [Creative Commons Attribution-Share Alike 3.0 Unported](#) and [Creative Commons Attribution-Share](#)

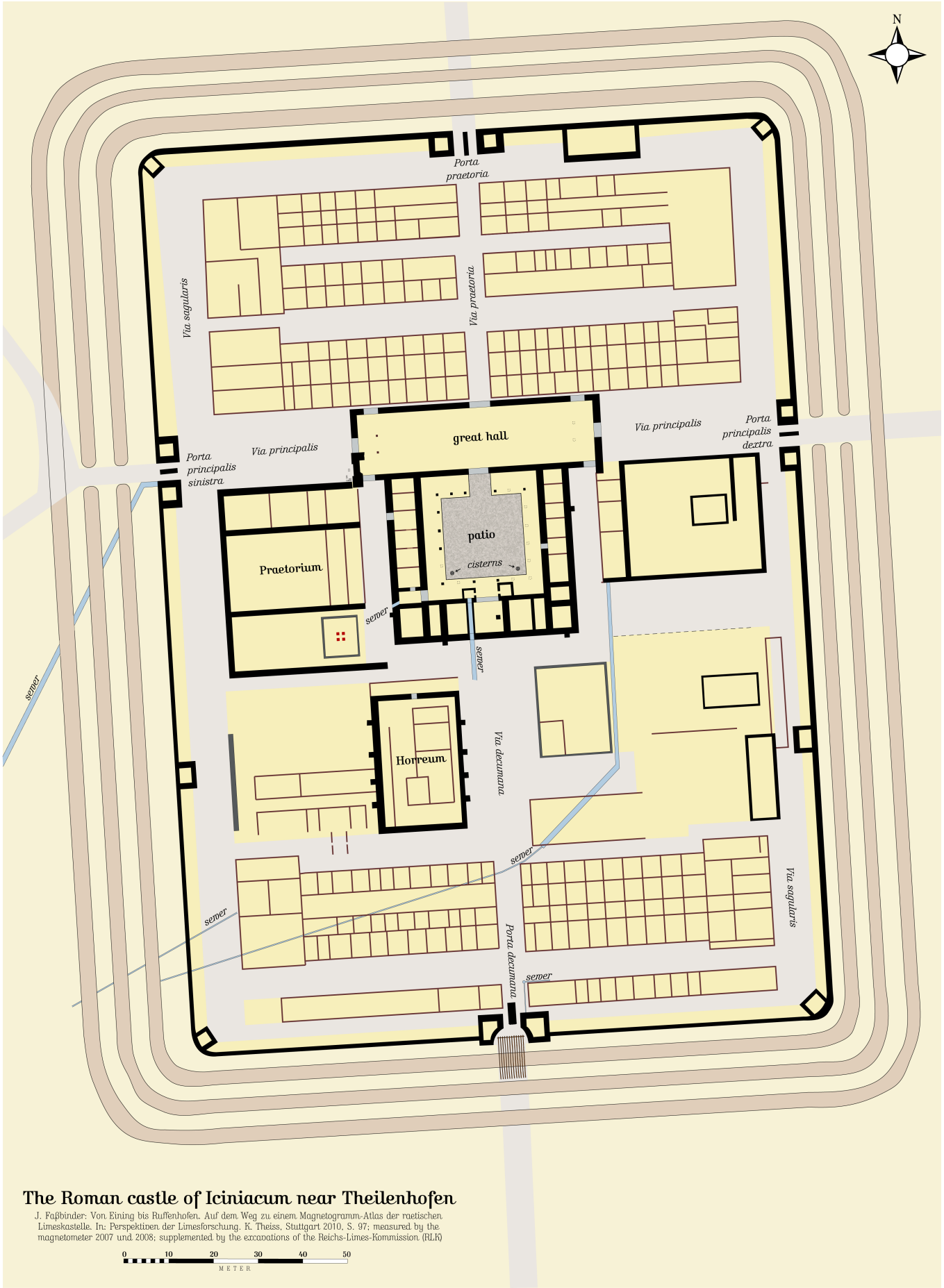
[Alike 4.0 International](#)

The northern most gate was used for bringing in supplies and therefore supplies were often kept near this gate. By the late Roman Empire, this area included a safe keep (forerunner of castles) and a prison.

Many important facilities were located between the via praetoria and the via quintana, including the quarters of high ranking officers, the hospital (valetudinarium, horse stables (veterinarium), metal and wood workshops (fabrica), and possibly the storehouses for grain (horrea) or meat (canarea). Special forces, including the marines (classici), cavalry (equites),

scouts (explorates), and carriers of the official unit pennants (vexillarii), were also located here.

There were both public and private latrines. The private latrine for the high ranking officers was in the praetorium. Public latrines were located in the intervallum. A public bath house (which included a latrine) was located on the main via principalis.



The Roman castle of Iciniacum near Theilenhofen in Bavaria, Germany

If there was a river or lake nearby, there would be a fortified naval installation. Because fortresses were typically built on the top of a hill, sometimes the main fortress and the naval fortress would be separated by a short distance.

All fortresses could be modified from the shared plans to take into account the terrain and other local circumstances.

proposed bases

The proposed bases would similarly be divided into two areas, one that is for the military only and the other in which civilians are allowed.

As many services that are useful to the reservation as possible would be in the public area and accessible to the members of that Native American nation and those that each Native American nation chooses to allow in. There is already widespread growth in sharing of resources among Native American nations and helping members of each other's nations.

There may be a smaller area accessible to the general public, possibly for such things as cultural centers. Or a cultural center or other facilities accessible to the general public could be placed outside the base.

training bases

training bases

There will be a need for training bases in addition to the common bases.

training bases

ports

ports

This fleet needs ports. At a minimum, a port on the west coast of the U.S., on the east coast of the U.S., and on Hawai‘i. More likely it will need additional ports in friendly nations around the world.

Ideally these will be ports under the control and ownership of Native American nations.

I propose the bases, ports, airfields, depots, and other facilities required to support the ships and the infrastructure of the Native National Guard should be built on land adjacent to existing reservations, adding to the sovereign native land, or on new land provided for those Native American nations that don't currently have a reservation. Key facilities, including the primary home ports for the armored ships, as well as maintenance and repair facilities, supply facilities, etc., would be on additional land provided the the U.S. govenrment that would be shared by the Native Americans and Native Hawai‘ians collectively.

ship design

ship design

Newport News Shipbuilding used a full-scale three-dimensional product model developed in Dassault Systèmes CATIA V5 to design and plan the construction of the *Gerald R. Ford*-class of aircraft carriers.

The CVN 78 class was designed to have better weapons movement paths, largely eliminating horizontal movements within the ship. Current plans call for advanced weapons elevators to move from storage areas to dedicated weapons-handling areas. Sailors would use motorized carts to move the weapons from storage to the elevators at different levels of the weapons magazines. Linear motors are being considered for the advanced weapons elevators. The elevators will also be relocated such that they will not impede aircraft operations on the flight deck. The redesign of the weapons movement paths and the location of the weapons elevators on the flight deck will reduce manpower and contribute to a much higher sortie generation rate.

design mistakes

The first two carriers of the *Ford*-class have run into problems with the plumbing of the waste system. The pipes were too narrow to handle the load of users, resulting in the vacuum failing and repeatedly clogged toilets. The solution was a specialized acidic cleaning solutions have been used to flush out the sewage system. These cleaning treatments cost about \$400,000 each time, resulting in a substantial unplanned increase in the lifetime expense of operating these ships according to the GAO. This is a good example of solving problems during design rather than during construction or even worse after deployment.

Catapult No. 4 on the *Nimitz*-class carriers cannot launch fully loaded aircraft because of low wing clearance along the edge of the flight deck.

design

The need for the new *Gerald R. Ford* class to replace the older *Nimitz*-class carriers: The current *Nimitz*-class aircraft carriers in US naval service have been part of United States power projection strategy since *Nimitz* was commissioned in 1975. Displacing about 100,000 tons when fully loaded, a *Nimitz*-class carrier can steam in excess of 30 knots (56 km/h; 35 mph), cruise without resupply for 90 days, and launch aircraft to strike targets hundreds of miles away. The endurance of the *Nimitz*-class is exemplified by USS *Theodore Roosevelt*, which spent 159 days underway during Operation Enduring Freedom without visiting a port or being refueled.

The *Nimitz* design has accommodated many new technologies over the decades, but it has limited ability to support the most recent technical advances. As a 2005 Rand report said, “The biggest problems facing the *Nimitz*-class are the limited electrical power generation capability and the upgrade-driven increase in ship weight and erosion of the center-of-gravity margin needed to maintain ship stability.”

With these constraints in mind, the US Navy developed what was initially known as the CVN-21 program, which evolved into CVN-78, *Gerald R. Ford*. Improvements were made through developing technologies and more efficient design. Major design changes include a larger flight deck, improvements in weapons and material handling, a new propulsion plant design that requires fewer people to operate and maintain, and a new, smaller island that has been pushed aft. Technological advances in electromagnetics have led to the development of an Electromagnetic Aircraft Launch System (EMALS) and an Advanced Arresting Gear (AAG). An integrated warfare system, the Ship Self-Defense System (SSDS), has been developed to allow the ship to more easily take on new missions. The new Dual Band Radar (DBR) combines S-band and X-band radar.

These advances will allow the new *Gerald R. Ford*-class carriers to launch 25% more sorties, generate triple the electrical power with improved efficiency, and offer crew quality-of-life improvements.

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ship construction

ship construction

It is likely that only two (2) to twelve (12) armored ships will be constructed and deployed.

Building large ships takes years to plan and then years to build.



Gerald R. Ford while under construction at Newport News, along with her construction crew, 2013. Newport News Shipbuilding begins flooding Dry

Dock 12 to float the aircraft carrier USS *Gerald R. Ford* (CVN-78). 11 October 2013

U.S. Navy photo by Mass Communication Specialist 1st Class Joshua J. Wahl

The capabilities to build the large armored plates for a battleship or other armored ship were scrapped after the end of World War II and don't currently exist anywhere on the planet.

Does it make any difference to the large defense contractors whether they build ships for the U.S. government or for Native American nations?

crew

crew

The crew for this fleet of ships needs to be trained and then based when not out underway.

Some of the personnel will be on the ships underway, some at the ports, and some at other bases and infrastructure.

supply acquisition

supply acquisition

Supplies must be acquired.

supply distribution

supply distribution

This fleet needs to be supplied. This includes facilities for storing and distributing supplies (both in ports and at other bases and distribution centers).

maintenance

maintenance

This fleet needs to be maintained. This includes routine maintence and major overhauls.

air operations

air operations

This fleet needs support from air vehicles. This includes airfields.

If the military role is shore bombardment, then there is also the need to deliver ground troops and provide them with essential support. This includes airborne troops.

land operations

land operations

This fleet needs support from land vehicles.

If the military role is shore bombardment, then there is also the need to deliver ground troops and provide them with essential support. This includes amphibious and airborne troops.

sea operations

sea operations

Sea operations are the primary location for fleet activity.

space operations

space operations

Surface and submerged vessels have had significant roles in space research.

The threat of a humanity killing asteroid or comet is real and inevitable. If we don't have the systems in place to detect and protect ourselves from this inevitable killer, all of humanity will be wiped out in a flash. As Neil deGrasse Tyson likes to point out, if the dinosaurs had had a Space Force, they'd still be here.

Our modern life is entirely dependent upon our satellite systems. Everything from the GPS system used in your smart phone to navigate to your destination (the GPS system was created and is operated and maintained by the U.S. Air Force) to the systems for delivering food, clothing, and other essentials of life only operate on a scale of billions of humans through the use of satellites.

Satellite collisions or malfunctions or purposeful human destruction or an accident or disaster of nature, can cause a cascade of space debris, the Kessler Syndrome, which could render low earth orbit unusable for at least hundreds of years, if not thousands of years. No more satellites, no more scientific missions, no use of space, a long term barrier to all human activity in space.

Further, there are essential space-based echnologies, essential for the continued growth and even continued existence of humanity, that are beyond the reach of for-profit businesses. Just as the existence of the entire aircraft industry was underwritten by the U.S. government air mail

program, numerous essential solutions, including materials, energy, and food, can only be solved through space programs. While these programs will eventually be turned over to private business, they can only be started by a large scale government effort, and it has to be a government large enough to be able to fund and sustain such an effort.

World famous astrophysicist and Director of the Hayden Planetarium Neil deGrasse Tyson explains [\[video\]](#), “The concept of a space force is not new. As a thing to do, we’ve done something like this before. You might remember, well, not remember, you might have read that in the Second World War, the Army had a branch called the Army Air Force [and before that called the Army Air Corps] and once we learned that this theater of operations had fundamentally different needs, different training, different technologies, different personnel, required to operate in that space, if you will, the air force split away from the army and became its own branch.”

Tyson continues [\[video\]](#), “So, this need is in response to the fact that space, in particular cislunar space (that is, space between the earth and the moon), to the extent that we conduct business in space, activities in space, we have billions of dollars worth of assets in space, generally one of the tasks of the military is not only to fight wars, but to protect your assets. So, in that sense, this idea is not completely crazy. And it’s been around for a while.”

Tyson adds [\[video\]](#), “By the way, space has been militarized ever since we and the Soviet Union sent intercontinental ballistic missiles through it. ICBMs use space to get to their destinations. And then we have reconnaissance satellites in the service of the military. We’ve been in space for 50 years, 60 years. So, this would simply be a bureaucratic addition to the U.S. government. It could help focus those activities. There are other frontiers rising up. Cyber, You have to ask, should there be a Cyber Force. The conduct of war is changing, so that could open some conversations that need to be had for these past decades.”

“Space is huge. It is much bigger than earth. let alone any nation on earth. Most nations use a large spectrum of departments for ministries to operate their country. We already see this happening with the American Space Force. The recognition that there is a need to approach space militarily and that NASA neither wants nor needs that role. No existing branch of the military was ideally suited for it and thus it had to be created.” —Isaac Arthur [Near Term Space Colonization](#)

“What happens is focus shifts back to the main goal of the body. Put the Army in charge of the space program and we would tend to favor programs that gave us better space-based ground surveillance satellites. Give the Air Force or Navy the funds to develop a space plane and they are going to subconsciously use those funds towards hypersonic fighters or bomber craft, as opposed to space defense paradigms. It’s institutional. And none of them are going to pour focus towards anti-satellite programs or asteroid defense or making rocket fuel or money in general. Give NASA \$10-billion to make a moon base and they are going to set up a telescope there, which honestly has very little to do with profit and industry unless you make and sell telescopes. Private companies involved in this don’t necessarily fix the problem either. The ones with the huge resources able to handle space development are generally are so big they have the same sort

of risk adverse behavior as government departments and governments in general have.” —Isaac Arthur [Near Term Space Colonization](#)

civilian applications

Space technology has greatly benefited civilian society and will continue to directly benefit civilian society.

One current example is GPS. The GPS satellites were launched by the U.S. Air Force for military use. To this day the U.S. Air Force continues to maintain and operate the GPS system.

Everytime an American uses the GPS navigation system on their smart phone, they should thank the U.S. military. This is just one of many examples of important everyday (often life-saving) technology developed for the military and/or space programs.

dinosaur-killing asteroids and comets

Neil deGrasse Tyson explains [\[video\]](#), “All space activities right now are under the Air Force. If we make a Space Force, what I’d like to do is add a couple of things to its portfolio. For example, we should check out asteroids [and comets], to see if one has our name on it and could render us extinct. And don’t just tell us that we will become extinct, do something about it. Right now there is no plan in place anywhere in the world to protect us against killer asteroids.”

Shoemaker-Levy 9 crashing into Jupiter woke humanity up to the threat of life ending comet or asteroid strikes. Since then a global effort has searched for and catalogued asteroids to discover any life-threatening orbits.

There is currently no international, national, or local organization with the responsibility for deflecting any life-threatening space object.

protecting satellites

Neil deGrasse Tyson explains [\[video\]](#), “To the extent that we conduct business in space, activities in space, we have billions of dollars of assets in space, generally one of the tasks of the military is not only to fight wars, but to protect your assets.”

Tyson continues [\[video\]](#), “Right now there is no plan in place anywhere in the world to protect us against the threat of space debris, that could interfere with commerce, interfere with any other kind of operation.”

The modern world absolutely depends on satellite networks and the U.S. (government, military, and corporate) satellite system is the largest in the world (well, actually, in low earth orbit).

Three nations have demonstrated the ability to destroy satellites (the U.S., Russia, and China have all destroyed at least one of their own satellites). Several other nations could immediately join this club.

Even things as basic and essential to life as the food distribution system require a working satellite system.

Protecting the satellites of America and America's allies is an essential military necessity.

space situational awareness

➤ From Joint Publication 3-14, Space Operations, 10 April 2018:

6

2. Space Situational Awareness

a. Situational awareness is fundamental to conducting space operations. SSA is the requisite foundational, current, and predictive knowledge and characterization of space objects and the OE upon which space operations depend – including physical, virtual, information and human dimensions – as well as all factors, activities, and events of all entities conducting, or preparing to conduct, space operations. Space surveillance assets include a mix of space-based and earth-based sensors. SSA is dependent on integrating space surveillance, collection, and processing; environmental monitoring; status of US and cooperative satellite systems; understanding of US and multinational space readiness; and analysis of the space domain. SSA must incorporate understanding of the space capabilities and intent of those that pose a threat to our space operations and space capabilities.

b. The Joint Space Operations Center (JSPOC) provides a COP to the Joint Force Space Component Commander (JFSCC) to enable broad, shared awareness of the JFSCC's critical information requirements, status of forces, SSA, and the full range of military activities arranged in time, space, and purpose.

—Joint Publication 3-14, Space Operations, 10 April 2018

space control

➤ From Joint Publication 3-14, Space Operations, 10 April 2018:



3. Space Control

a. Space control employs OSC and defensive space control (DSC) operations to ensure freedom of action in space and, when directed, defeat efforts to interfere with or attack US or allied space systems. Space control plans and capabilities use a broad range of response options to provide continued, sustainable use of space. Space control contributes to space deterrence by employing a variety of measures to assure the use of space, attribute enemy attacks, and consistent with the right to self-defense, target threat space capabilities.

b. **OSC.** OSC operations consist of offensive operations conducted for space negation, where negation involves measures deceive, disrupt, degrade, deny, or destroy space systems or services. Adversaries, both state and non-state actors, will exploit the availability of space-based capabilities to support their operations. In keeping with the principles of joint operations, this makes it incumbent on the US to deny adversaries the ability to utilize space capabilities and services. OSC actions targeting an enemy's space-related capabilities and forces could employ reversible and/or nonreversible means.

(1) **Deceive.** Measures designed to mislead an adversary by manipulation, distortion, or falsification of evidence or information into a system to induce the adversary to react in a manner prejudicial to their interests.

(2) **Disrupt.** Measures designed to **temporarily impair** an adversary's use or access of a system for a period, usually without physical damage to the affected system.

(3) **Deny.** Measures designed to **temporarily eliminate** an adversary's use, access, or operation of a system for a period, usually without physical damage to the affected system.

(4) **Degrade.** Measures designed to **permanently impair** (either partially or totally) the adversary's use of a system, usually with some physical damage to the affected system.

(5) **Destroy.** Measures designed to **permanently eliminate** the adversary's use of a system, usually with physical damage to the affected system.

c. **DSC.** DSC operations consist of all active and passive measures taken to protect friendly space capabilities from attack, interference, or unintentional hazards. DSC safeguards assets from unintentional hazards such as direct or indirect attack, space debris, radio frequency interference, and naturally occurring phenomenon such as radiation. DSC measures can apply to defense of any segment of a space system—space, link, or ground.

(1) Successful DSC operations include the ability to preempt and suppress attacks. DSC capabilities should be integrated with SSA elements that provide the ability to detect, characterize, and attribute an attack to an enemy. A robust DSC capability influences enemies' perceptions of US space capabilities and makes them less confident of success in interfering with those capabilities.

(2) DSC contributes to space deterrence by employing a variety of measures that help assure the use of space and, consistent with the inherent right of self-defense, defend our space systems and contribute to the defense of allied/partner space systems.

(3) Active space defense consists of those actions taken to neutralize imminent space control threats to friendly space forces and space capabilities.

(4) Passive space defense consists of all measures (except active space defense measures) taken to minimize the effectiveness of on-orbit and terrestrial threats to friendly space forces and friendly space capabilities. Passive space defense measures could include camouflage, concealment, and deception; evasion; dispersal of space systems; and hardening of space system links and nodes.

—*Joint Publication 3-14, Space Operations, 10 April 2018*

protecting satellites

The current Air Force Space Command already tracks all of the satellites in orbit to make sure that they don't collide with each other or with space debris. The Space Command notifies owners of satellites to reposition their satellites to avoid anticipated impacts.

The U.S. military is believed to already be working on active measures to protect satellites, possibly including jamming control signals of enemy space weapons, using lasers to blind the sensors of enemy threats, and using kinetic objects (especially missiles or other satellites) to destroy enemy threats.

The U.S. Air Force's top secret X-37B aircraft has orbited the Earth for extended time periods. The military purpose is top secret. Leading guesses include surveillance and the ability to attack or protect satellites.

A proposed Defense Authorization Act from Congress would require the Department of Defense to come up with a "space warfighting policy" and some lawmakers want Reagan's "Star Wars" missile defense system or other similar ability to destroy ballistic missiles from space.

Repeat This passage directly applies to this section and is a repeated quotation from Joint Publication 3-14, Space Operations, 10 April 2018:

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—*Joint Publication 3-14, Space Operations, 10 April 2018*

space debris

An important role is preventing, avoiding, and cleaning up space debris. Cascading collisions of space debris could render space unreachable for more than a thousand years.

➤ From Joint Publication 3-14, Space Operations, 10 April 2018:

b. **Debris.** Operational satellites are under constant threat of impact. Orbiting particulates left behind during a satellite's lifetime, debris from satellite explosions or impacts, trash such as rocket bodies, and natural objects such as meteoroids may damage operational systems. Further complicating this problem is that much of the debris is too small to track with current sensor capabilities.

(1) **Debris Dispersal.** Generally, if an object detaches from an orbiting body, no matter its size, it will initially follow the same orbit. Debris may take weeks, months, or even years to separate from its source. Even clouds of objects, created by explosive events, will only slowly disperse once the initial explosion is complete. Depending on altitude and velocity, such objects may remain in a stable orbit for tens or even hundreds of years.

(2) **Cascading Collisions.** The preferential use of certain orbits compounds the collision risk by concentrating large numbers of objects in discrete bands. Congestion in space is a well-recognized problem. The National Aeronautics and Space Administration (NASA) estimates there are approximately 500,000 orbiting objects between 1 and 10 centimeters in size. As the orbital space around the Earth becomes more congested, a small collision may create a chain reaction of collisions, creating debris that renders some orbits unusable for centuries.

(3) **Collision avoidance** involves maneuvering spacecraft to avoid a collision of space objects against an impending hazard to the safety of astronauts or the space vehicle. Such actions may shorten the overall operational life span of the spacecraft. Nearly a decade after China's 2007 ASAT weapon test, approximately 3,000 discrete pieces of debris remain in orbit. This debris field has required satellite operators to conduct collision-avoidance maneuvers for spaceflight safety.

—Joint Publication 3-14, Space Operations, 10 April 2018

navigation warfare

➤ From Joint Publication 3-14, Space Operations, 10 April 2018:

d. Navigation Warfare (NAVWAR)

(1) NAVWAR is deliberate offensive and defensive actions to assure friendly use and prevent adversary use of PNT information through coordinated employment of space, cyberspace, and electronic warfare (EW) capabilities. NAVWAR is further enabled by supporting activities such as ISR and EMS management.

(2) At the operational level, a JFC may gain a desired advantage by integrating diverse capabilities to create NAVWAR effects. Integrated offensive and defensive NAVWAR activities ensure friendly PNT information use is unimpeded while simultaneously denying the threat's use of PNT information. When formulating NAVWAR courses of action (COAs), JFCs must understand the tradeoffs between NAVWAR effects and potential degradation to friendly forces and civil, commercial, and scientific users (as stipulated by US national space-based PNT policy).

For additional information about NAVWAR, see JP 3-13.1, Electronic Warfare, and JP 3-12, Cyberspace Operations.

4. Positioning, Navigation, and Timing

a. Military users depend on assured PNT systems for precise and accurate geo-location, navigation, and time reference services. PNT information, whether from space-based global navigation satellite systems (GNSSs), such as GPS, or non-GNSS sources, is mission-essential for virtually every modern weapons system. For decades, GPS provided the global community largely uncontested access to space-based PNT services. Because of its constant availability, free access, high accuracy, and modest cost of user equipment (i.e., GPS receivers), other nations' military forces integrated GPS into their tactics, techniques, and procedures (TTP). The international community is acutely aware of their dependence on, and consequent vulnerability from, GPS. For this reason, other GNSSs are in various stages of development. The increasing availability of non-US-based GNSSs means adversaries may leverage GPS while it provides an

operational advantage, then attempt to deny US and allies GPS through jamming, while preserving their own PNT capabilities via other systems. The US must protect assured PNT through the synergy of cyberspace, space, and EW operations.

b. GPS provides two levels of positioning services. The standard positioning service is available to all users through the broadcast of an unencrypted signal. The precise positioning service, used by DOD, authorized government agencies, and some US allies, leverages an encrypted code broadcast over two frequencies. Precise positioning service users retain a significant advantage over standard positioning service users due to the relative robustness of the encrypted signal and the ability to correct for environmental conditions by accessing two frequencies. Newer military GPS receivers incorporate an architecture (both hardware and software) that safeguards classified GPS cryptographic keys and algorithms and protects signals from exploitation.

For additional information on PNT, see Department of Defense Instruction (DODI) 4650.08, Positioning, Navigation, and Timing (PNT) and Navigation Warfare (NAVWAR).

—Joint Publication 3-14, *Space Operations*, 10 April 2018

intelligence, surveillance, and reconnaissance

➤ From Joint Publication 3-14, *Space Operations*, 10 April 2018:

6

5. Intelligence, Surveillance, Reconnaissance

a. Space-based intelligence collection synchronizes and integrates sensors, assets, and systems for gathering data and information on an object or in an area of interest (AOI) on a persistent, event-driven, or scheduled basis. Space-based ISR, which includes OPIR, tasking, and collection, is conducted by an organization's intelligence collection manager to ensure integrated, synchronized, and deconflicted operations of high-demand assets. This includes warning (to include ballistic missile activity), targeting analysis, threat capability assessment, situational awareness, battle damage assessment (BDA), and characterization of the OE. Space-based intelligence collection supports the

President and USG departments and agencies (e.g., National Geospatial-Intelligence Agency [NGA], National Security Agency [NSA], and DOD). The CCMDs and the components have access to space capabilities that can collect diverse military, diplomatic, and economic information for planning and execution across the range of military operations and to the intelligence derived and developed from the data collected.

b. Significant advantages of space-based collection capabilities are their coverage over denied areas where little or no data can be obtained from ground, maritime, or airborne sensors and their mission longevity. While able to provide worldwide coverage, demands on individual space-based systems often exceed their capacity, and their associated orbit requirements may limit the ability to meet operational requirements. Space-based ISR systems are operated by military, nonmilitary, and intelligence community (IC) organizations. International cooperation in military space-based intelligence collection systems with allies and other partners contributes to US national security objectives by improving resiliency and interoperability, supporting multinational operations, and building partnership capacity and capability.

c. Often, the product of a space or terrestrial capability can enhance intelligence accuracy and shorten reaction time by cueing another space system to survey an AOI. Likewise, a space-based capability may cue a terrestrial-based system on a noninterference basis for more precise location, discrimination, and targeting.

d. ISR capabilities also enhance planning by providing updated information regarding terrain and adversary force dispositions. Space-based imagery, in particular, supports military intelligence activities, including warning, current intelligence, order of battle, scientific and technical intelligence assessments, targeting and combat assessments, and mission planning and rehearsal. Commanders should be aware, adversaries may have access to similar capabilities to employ against US forces.

—*Joint Publication 3-14, Space Operations, 10 April 2018*

satellite communications

➤ From Joint Publication 3-14, Space Operations, 10 April 2018:

6. Satellite Communications

a. SATCOM systems inherently facilitate beyond LOS connectivity. Depending on its configuration, a robust SATCOM architecture provides either worldwide coverage (non-polar) or global coverage (includes poles). This provides national and strategic leadership with a means to maintain situational awareness and convey their intent to the operational commanders responsible for conducting joint operations. SATCOM also provides critical connectivity for tactical maneuver forces and disadvantaged users whose rapid movement and geographically dispersed deployments remove them from direct access to terrestrial communications infrastructures. SATCOM systems provide voice and data connectivity that facilitates C2, survivable communications for Presidential support, nuclear C2, and intelligence.

b. The inherent capabilities of satellite systems provide significant advantages over other communications systems.

(1) **Global Coverage.** Collectively, SATCOM systems provide global coverage. If required, satellites can focus capacity in areas of special interest.

(2) **Real-Time, Over-the-Horizon Transmission of Voice and Data.** Like other communications media, most SATCOM systems provide real-time connectivity for both voice and data. Unlike other communications media, SATCOM can provide global voice and data transmission such as the tracking of force disposition and status.

(3) **Independence from Terrestrial Communications Architecture.** Some SATCOM links preclude the need for long terrestrial communications links. Furthermore, these specific SATCOM links enable US forces to communicate without the need for physical connectivity or terrestrial LOS communication over relay infrastructure.

(4) **Flexibility.** Satellite systems allow global coverage and interlinking between frequency bands and systems, and certain systems are able to provide a relatively low probability of detection (LPD). Flexibility gives the JFC a great deal of latitude in mixing and matching satellite systems to meet specific operational requirements. Selected waveforms and directional antennas afford LPD, wide bandwidths allow higher data rates, ground stations permit cross patching, and satellite positions make global coverage available.

(5) **Support to Mobile Forces.** SATCOM systems can provide the communications required by mobile forces operating over wide areas.

—Joint Publication 3-14, *Space Operations*, 10 April 2018

environmental monitoring

This includes the threat of global climate change.

► From Joint Publication 3-14, *Space Operations*, 10 April 2018:

6

7. Environmental Monitoring

a. **Terrestrial Environmental Monitoring.** Terrestrial environmental monitoring provides information on meteorological and oceanographic (METOC) factors in the maritime, land, and air domains that affect military operations. Space-based environmental sensing supports the development of METOC forecasts and assessments of environmental impacts on both friendly and threat military systems and operations. Environmental monitoring information includes data provided by non-DOD satellites, such as National Oceanic and Atmospheric Administration (NOAA) operational weather and NASA research satellites, as well as foreign satellites such as the European and Japanese geostationary weather satellites. This information is used by the 557th Weather Wing, the Fleet Numerical Meteorology and Oceanography Center, and the Naval Oceanographic Office to support joint forces and Services, as well as by individual forecasters in the field, supporting local units. A prime advantage of environmental satellites is their ability to gather data in remote or hostile areas, where little or no data is available via surface reporting stations. For example, space-based environmental data is critical over most oceanic regions, where terrestrially observed data is often sparse.

b. **Space Environmental Monitoring.** Space environmental monitoring provides data that supports forecasts, alerts, and warnings for the space environment that may affect space assets, space operations, and their terrestrial users. Space-based monitoring of the space domain provides the ability to detect and mitigate the impacts of space weather on satellites, manned spaceflight, and communications to, from, and through space. Detection of solar events and measurement of the radiation environment allow operators to protect resources and deduce likely causes of spacecraft anomalies.

c. Environmental Monitoring Support. Environmental monitoring support to joint operations gives the JFC awareness of the OE. This support is normally provided by METOC forces assigned to one or more of the participating components. When two or more units are involved in a joint operation, coordination of their support is normally accomplished by the joint METOC coordination cell.

See JP 3-59, Meteorological and Oceanographic Operations, for more information on the organization of METOC forces.

—Joint Publication 3-14, Space Operations, 10 April 2018

missile warning

➤ From Joint Publication 3-14, Space Operations, 10 April 2018:

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8. Missile Warning

a. The missile warning mission uses a mix of space-based and terrestrial sensors. Missile warning supports the warning mission executed by North American Aerospace Defense Command to notify national leaders of a missile attack against North America, as well as attacks against multinational partners (via shared early warning [SEW]) in other geographic regions. It also includes notification to geographic CCMDs, multinational partners, and forward-deployed personnel of missile attack, and the assessment of a missile attack if the applicable CCMD or multinational partner is unable to do so. Collectively, space-based sensors provide continuous coverage of all CCMD areas of responsibility (AORs). These persistent, overhead satellite sensors are linked via multiple missile warning/defense data processing and dissemination systems to CCDRs and subordinate forces. This theater system takes advantage of direct downlinks, key protected SATCOM, and tactical communications systems. The theater-event system architecture enables rapid dissemination of missile-event warning messages to warfighters, thereby enabling effective passive defense, active defense, and offensive operations.

b. Space-based sensors, such as Defense Support Program, Space-Based Infrared System, and IC sensors, usually provide the first indication of a missile

launch. Ground-based radars provide follow-on information on launches and confirmation of strategic attack. These ground-based radar systems include the following: Ballistic Missile Early Warning System, Perimeter Acquisition Vehicle Entry Phased Array Warning System, and the Perimeter Acquisition Radar Attack Characterization System. Upgraded early warning radars are multi-mission radars supporting the missile warning, space surveillance, and missile defense missions. There is no room for error in missile warning; therefore, all information provided must be timely, accurate, and unambiguous.

For information on performance criteria for missile warning, see Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6210.02, (U) Information and Operational Architecture of the Integrated Tactical Warning and Attack Assessment System.

—Joint Publication 3-14, *Space Operations*, 10 April 2018

nuclear detonation detection

➤ From Joint Publication 3-14, *Space Operations*, 10 April 2018:



9. Nuclear Detonation Detection

Nuclear detonation detection capabilities provide a persistent, global, and integrated sensor capability to provide surveillance coverage of critical regions of the globe and provide warning and assessment recommendations to the President, Secretary of Defense (SecDef), and CCDRs, indicating place, height of burst, and yield of nuclear detonations. Space-based systems, ground-based systems, correlation center C2 systems, and CCDR/national leadership decision-support systems support time-critical event conferencing. These systems provide allies and senior leaders the requisite timely warning and characterization of nuclear detonations to support threat/non-threat determination and follow-on decision making. In countering weapons of mass destruction (WMD), detection of nuclear detonations can be used to help identify proliferators.

—*Joint Publication 3-14, Space Operations, 10 April 2018*

spacelift

➤ From Joint Publication 3-14, Space Operations, 10 April 2018:

10. Spacelift

Spacelift is the ability to deliver payloads (satellites or other materials) into space. Assured access to space includes spacelift operations and range operations. Air Force Space Command (AFSPC) conducts these operations as a Service function that supports other Services and the joint force.

a. Spacelift operations deploy, sustain, augment, or reconstitute satellite constellations supporting US military operations, national security objectives, and/or commercial customers. DOD procures commercial services for spacelift, a practice that supports National Space Policy. Space launches are usually planned several years in advance and executed in accordance with the established space launch manifest. Planners should account for the long lead times involved with the manifest scheduling process.

b. Range operations are critical to spacelift operations and provide assured, responsive access to space with an emphasis on public safety. Space ranges provide launch campaign support, pre-launch testing, launch traffic control, and scheduling services for spacelift operations. Launch ranges may also be responsible for planning and execution of space launch vehicle and spacecraft recovery operations.

—*Joint Publication 3-14, Space Operations, 10 April 2018*

disaster relief

Global disaster relief is revolutionized by the capability to deliver disaster relief personnel, supplies, and equipment from space. The Native National Guard can provide an immediate response to any location on the planet, no matter how remote. The time until outside relief arrives is the critical factor in how many lives are saved.

The Native National Guard can respond to any disaster in United States territory upon the command of the president or the secretary of space. Response to all other nations requires the approval and invitation of the host nation.

Native National Guard personnel can arrive anywhere in hours or less and immediately initiate search and rescue operations. Distribution of food, clothing blankets, baby supplies, and other vital items can start within an hour of deployment. One or more military field hospitals (depending on the size and severity of the disaster) can be set up in less than 12 hours. An emergency airstrip can be built in 12 to 72 hours, depending on local conditions and whether or not an existing airfield is being repaired or an airstrip is being created from scratch.

Because of the high cost of moving heavy items into low earth orbit, large items, such as the field hospital and airstrip, will be transferred to other branches of the military, donated to U.S. states or territories, or donated to the Peace Corps in foreign nations.

- From Humanitarian Assistance and Disaster Relief by the Military Health System:

‘

Humanitarian Assistance and Disaster Relief

Humanitarian assistance and disaster response are core DoD capabilities, but they are always conducted in a supporting role to assist other U.S. Government agencies. DoD has the assets and experience to deploy necessary relief personnel and resources to all corners of the globe at a moment's notice—there is no actor better prepared to respond in times of crisis.

We have seen the positive impact of DoD's efforts on the broader U.S. Government response to international disasters in a number of cases:

- In Operation Tomodochi, after the Japanese earthquake and tsunami in 2011—U.S. forces were instrumental in delivering food, water, blankets, clothing, and medical supplies to support Japanese civilian and military partners.
- During Typhoon Haiyan in the Philippines, Service Members were on the ground working with the Philippine military to provide essential medical treatment and supplies.
- During the Ebola epidemic in West Africa, Service Members were involved in constructing treatment centers and providing logistical support to stem the spread of infection.
- In the aftermath of the devastating 2015 Nepal earthquake, U.S. military personnel were instrumental in supporting relief efforts with transportation and medical treatment, and where previous training

exercises with the Nepalese military significantly improved their capacity to respond to the crisis.

These engagements have provided invaluable hands-on experience for service members that helps improve our future contributions to disaster relief efforts. They demonstrate time and again the value of our partnership-building activities, as partner nations have improved their disaster response capabilities after joining U.S. military in training exercises.

—*Humanitarian Assistance and Disaster Relief*

► From Military responses to natural disasters: last resort or inevitable trend? by Charles-Antoine Hofmann and Laura Hudson, British Red Cross, October 2009:

‘

Military involvement in natural disasters

While the involvement of the military in relief operations is not new (think of the 1948-49 Berlin airlift, for example), military engagement in relief activities has grown since the early 1990s. Military resources were used in response to the 1991 cyclone in Bangladesh, and after Hurricane Mitch in Central America in 1998. More recently, the US military supported the response to Hurricane Katrina in 2005, the UK military was brought in to help tackle floods in Britain in 2007 and huge numbers of Chinese troops were deployed in the aftermath of the earthquake in Sichuan province in 2008. Following the October 2005 earthquake in Pakistan, domestic and international military actors mounted the largest humanitarian helicopter airlift ever seen. Regional alliances too are paying growing attention to the role of the military. Initiatives are currently under way in the Asia-Pacific region, largely in reaction to the tsunami. NATO is playing a growing humanitarian role in disaster response, for example in the US Katrina response and the Pakistan relief operation in 2005.

There are various factors driving the growing interest of the military in responding to disasters: assisting relief efforts can improve the military's image and provide training opportunities, and may also be a way for the military to diversify their role at a time when armed forces globally are experiencing budget cuts. With an increase in the incidence of natural disasters, national and foreign militaries can be expected to play a bigger role, particularly in large-scale disasters, where the capacity of humanitarian organisations may be

stretched.

Humanitarian actors view these developments with a wary eye. In the US, the NGO consortium InterAction has raised concerns about the newly established US Command for Africa (AFRICOM), whose tasks include supporting humanitarian assistance. Growing interest within the European Union in deploying civil defence and military assets outside EU territory has prompted similar concerns. Critics of the military's involvement in relief claim that it is inefficient, inappropriate, inadequate and expensive, contrary to humanitarian principles and driven by political imperatives rather than humanitarian need.

Guidelines on civil/military relations in natural disasters

The Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief, known as the Oslo Guidelines, state that, whereas the involvement of domestic military forces is often a first resort due to lack of capacity elsewhere, the use of foreign military assets must be a last resort. These guidelines also clearly affirm the primary responsibility of the affected state for providing humanitarian assistance on its territory, and state that foreign military and civil defence assets must complement (rather than supplant) existing relief mechanisms. The final authority over the use of foreign military assets clearly lies with the affected state: for instance, the Indonesian government accepted a good deal of foreign military support, but put a 90-day limit on deployments. The principles of Good Humanitarian Donorship affirm the primary position of civilian organizations in implementing humanitarian action, and require states to ensure that military assistance is in conformity with international humanitarian law and humanitarian principles, and recognizes the leading role of humanitarian organizations.

—*Military responses to natural disasters: last resort or inevitable trend?* by Charles-Antoine Hofmann and Laura Hudson, British Red Cross, October 2009

human rights

human rights

Preamble

Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,

Whereas disregard and contempt for human rights have resulted in barbarous acts which have outraged the conscience of mankind, and the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people,

Whereas it is essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that human rights should be protected by the rule of law,

Whereas it is essential to promote the development of friendly relations between nations,

Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom,

Whereas Member States have pledged themselves to achieve, in co-operation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms,

Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge,

Now, therefore,

The General Assembly,

Proclaims this Universal Declaration of Human Rights as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.

Article 1

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

Article 2

Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty.

Article 3

Everyone has the right to life, liberty and security of person.

Article 4

No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5

No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.

Article 6

Everyone has the right to recognition everywhere as a person before the law.

Article 7

All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination.

Article 8

Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law.

Article 9

No one shall be subjected to arbitrary arrest, detention or exile.

Article 10

Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him.

Article 11

1. Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defence.

2. No one shall be held guilty of any penal offence on account of any act or omission which did not constitute a penal offence, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed than the one that was applicable at the time the penal offence was committed.

Article 12

No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.

Article 13

1. Everyone has the right to freedom of movement and residence within the borders of each state.

2. Everyone has the right to leave any country, including his own, and to return to his country.

Article 14

1. Everyone has the right to seek and to enjoy in other countries asylum from persecution.

2. This right may not be invoked in the case of prosecutions genuinely arising from non-political crimes or from acts contrary to the purposes and principles of the United Nations.

Article 15

1. Everyone has the right to a nationality.

2. No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality.

Article 16

Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.

Marriage shall be entered into only with the free and full consent of the intending spouses.

The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.

Article 17

1. Everyone has the right to own property alone as well as in association with others.
2. No one shall be arbitrarily deprived of his property.

Article 18

Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 20

1. Everyone has the right to freedom of peaceful assembly and association.
2. No one may be compelled to belong to an association.

Article 21

Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.

Everyone has the right of equal access to public service in his country.

The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

Article 22

Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.

Article 23

1. Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment.

2. Everyone, without any discrimination, has the right to equal pay for equal work.

3. Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.

4. Everyone has the right to form and to join trade unions for the protection of his interests.

Article 24

Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.

Article 25

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

Article 26

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.
3. Parents have a prior right to choose the kind of education that shall be given to their children.

Article 27

1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.
2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Article 28

Everyone is entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized.

Article 29

1. Everyone has duties to the community in which alone the free and full development of his personality is possible.
2. In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.
3. These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations.

Article 30

Nothing in this Declaration may be interpreted as implying for any State, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.

stories

stories

Amazons
Monster

story: Amazons

Amazon story

NOTES:

A few years ago I was looking at a map that showed shipping traffic and I noticed among the gaps between the shipping lanes was a small patch in the Atlantic between Brazil, Africa, Europe, and North America, approximately on the Mid-Atlantic Ridge.

A perfect spot for an island about double the land area of Iceland. Atlantis.

Maybe that little astroid (real word, look it up) or tetracuspid of non-shipping lane traffic is to avoid contact with Atlantis. Maybe Atlantis has always been there, but for some reason, maybe magic, everyone keeps going around it and avoiding contact.

In this version, there are 12 tribes, each living predominatly on one of the major kinds of terrain. I could try to force the position of each patch of land so it was at least plausible, but it is easier to simply avoid too much discussion of how the different terrains share the island.

An island arising from the Mid-Atlantic Ridge should be all volcanic rock -- igneous. But for some unreasonable reason, this island somehow traps some land from other origins giving sedimentary and metamorphic rock as needed for greater variety.

INT. PRESIDENTIAL OFFICE - DAY

OPEN in the president's office with Secretaries of State and Defense and National Security Advisor.

PRESIDENT (78), seated.

This is an outrage. Bomb them back to the stone age. I want their cities reduced to rubble.

EXT. COASTAL - DAY

Coastal setting

EXT. DESERT - DAY

Desert setting

EXT. FOREST - DAY

Forest setting

EXT. GLACIER - DAY

Glacier setting

EXT. HILLS - DAY

Hills setting

EXT. JUNGLE - DAY

Jungle setting

EXT. MOUNTAINS - DAY

Mountains setting

EXT. OCEAN - DAY

Ocean and islands setting

EXT. PLAINS - DAY

Wide open plains setting

EXT. RIVERS - DAY

rivers and lakes setting

EXT. SWAMP - DAY

Swamp setting

EXT. VOLCANO - DAY

Volcano setting

EXT. CITY - DAY

Urban city setting

EXT. ARCHAEOLOGICAL DIG - DAY

Archaeology dig setting

INT. LOCATION - NIGHT

INT/EXT LOCATION - TIME

HALLWAY

CUT TO:

NAME (O.S.)

NAME (V.O.)

story: Monster

Monster story

EXT. SWAMP - DAY

WE OPEN in a bayou.

FIRE (21), rowing.

He pauses.

FIRE

(mumbling)

They have forgotten all about us.

INT. LOCATION - NIGHT

INT/EXT LOCATION - TIME

HALLWAY

CUT TO:

NAME (O.S.)

NAME (V.O.)

emergency message

IMPORTANT NOTE:

Comment from Milo: I don't have money. A close friend, Annie, is going through some horrible times. I need to gather some money to help her.

I do have programming and writing skills. I am gathering together materials I previously created and writing a whole bunch of new stuff, including lessons on how to program computers.

I am giving those lessons away for free. You can contact me directly through the contact form at the Twitter account [@TSOStheband](#) (which includes a lot of different subjects, including political views you may despise). My hope is to generate enough interest in this electronic PDF book that enough people will see it that a small portion will be willing to donate at [Help Annie GoFundMe page](#).

The lessons are free. Donations are completely optional. None of the money is for me, all of it is for Annie. She is a fantastic person. She really is.

From [Help Annie GoFundMe page](#):

I'm Jeff, and I'd like to help a friend, Annie, who is suffering from depression and recovering from domestic abuse. She is having a tough time keeping a roof over her head, and is scheduled to be evicted on Monday or Tuesday. So I'm trying to raise money so she can move out from the motel and get into something more stable.

She's in the state of Virginia, and me and another friend of hers (Milo) are in California and are trying to raise money to, 1 - keep a roof over her head, and 2 - get her into a better

place. The Virginia Rent Relief Program was going to pay her rent, but fell through at the last minute because they won't pay for a motel.

So, the most immediate problem is paying for her motel, which is \$312 a week. Then she needs help with a first and last, etc... to move into something more stable.

I've suffered from severe depression before, and I know how horrible it is. I'd love to pay for everything, but I'm only barely getting by myself. So I'm asking for help for her.

Thank you for your time, and anything you can do to help her!

~Jeff

my music

my music

Comment from Milo: Hear is some of my music (on the next few pages):

This works on my machine using the standard Adobe Acrobat Reader.

When you click on the play button for a song, you will have to choose from the options to trust the PDF.

This does *not* work using Apple's Preview.

Please contact me at [@TSOStheband](#) and let me know if it works and what you used to read the PDF. Thanks.

Musíc

Here is a sampling of our music:



So far I have only found the music working in one of Adobe's PDF prorgams (including the free reader). It does not work in Apple's Preview nor any of the we browsers I have tried. When you click on the play button, at the top of the window there will be a drop down menu for options. If you choose to trust this PDF, then the music will play.

“Time Heals”



© 1986 Cindy Boren
piano ballad

musicians:

- **lead vocals:** Gabrielle
- **lead guitar:** John Toner
- **piano:** Billy Meza
- **keyboards:** Jeff Avella
- **rhythm guitar:** John Toner
- **bass:** Misha
- **drums:** Dave D. Ramirez
- **percussion:** Milo
- **producer:** Milo

lyrics

They say that time heals all wounds
But I'll never get over you
Don't know what I'm gonna do
Til the end of time
And I can't help myself
Everytime you walk into the room
You are the sun and the moon
You are the starry nights.

And you know
That I wouldn't lie
I love you more
As time goes by
And I'll find some way
To make you feel it too

They say that time heals all wounds
And I know that you've had a few
But mine is a love that's new
Keep me on your mind
And you can't help yourself
When you don't know which way to go
There's never an end to the road
But your road is mine

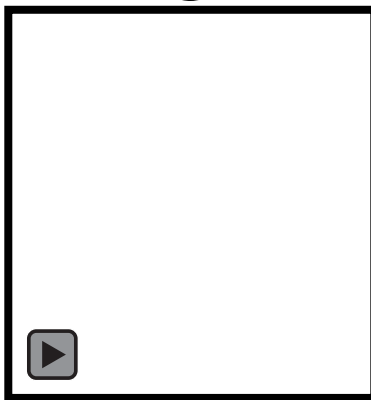
And you know
That I wouldn't lie
I love you more
As time goes by
And I'll find some way
To make you feel it too

lead break

And you know
That I wouldn't lie
I love you more
As time goes by
And I'll find some way
To make you feel it too

They say that time heals all wounds
Time heals all wounds
They say that time heals all
time heals all
time heals all wounds
They say that time heals all
time heals all
time heals all wounds

“Enigma”

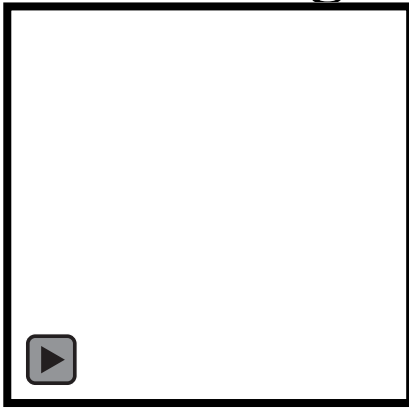


© 2005 Brent Catalano, James F. Fahnestock, and Milo
techno

musicians:

- **lead vocals:** James F. Fahnestock
- **backing vocals:** James F. Fahnestock
- **keyboards:** Brent
- **electronic drums:** Brent
- **real drums:** Mark Nakagawa
- **guitar:** Bill Gunville
- **percussion:** Milo
- **remix:** Milo
- **producer:** Milo

“Amazing”



© 2002 James F. Fahnstock and Bill Gunville
metal

musicians:

- **lead vocals:** James F. Fahnstock
- **backing vocals:** James F. Fahnstock
- **lead guitar:** Bill Gunville
- **rhythm guitar:** Bill Gunville, Brian Catalano
- **bass:** Jeff Yorke
- **drums:** Jimmy Schultz
- **voice over:** MichaelM (performing as radio preacher)
- **producer:** Milo

lyrics

Screaming down the freeway faster than hell
I'm loaded, I'm crazy, I'm under a spell

I need another hit to keep me alive
Before I never quit I believed in its lies

It's so amazing the moment that you come back
It's so amazing the what you lose — what you lose
It's so amazing it's something so intriguing
Break you and reveal you.

I'm falling deeper I'm out of control
I don't even know I'm losing my soul
You pass from everything is making me burn
Just one more hit and I'll feel sane.

Yeah, ew

It's so amazing the moment that you come back
It's so amazing the what you lose — what you lose
It's so amazing it's something so intriguing
Break you and reveal you.

Ew, ew

It's so amazing the moment that you come back
It's so amazing the what you lose — what you lose
It's so amazing it's something so intriguing
Break you and reveal you.

It's so amazing
It's so amazing
It's so amazing
It's so
It' so amazing.

Ew, ew

It's so amazing the moment that you come back
It's so amazing the what you lose — what you lose
It's so amazing it's something so intriguing
Break you and reveal you.

Ew, ew

It's so amazing the moment that you come back
It's so amazing the what you lose — what you lose
It's so amazing it's something so intriguing
Break you and reveal you.

It's so amazing
It's so amazing
It's so amazing
It's so
It' so amazing.

“For the Last Time”



© 1987 John Toner and Lisa Kay
hard rock

musicians:

- **lead vocals:** Gabrielle
- **lead guitar:** John Toner
- **organ:** Bill Turner
- **rhythm guitar:** John Toner
- **bass:** Deryl Dixon
- **drums:** David D. Ramirez
- **producer:** Milo

lyrics

Time and time again
I've swallowed my pride
hoping that you'll change
each time you hurt me more inside

MINI-LEAD

I've tried to believe
that it would get better someday
but it only got worse
and now there's nothing left to say

I've been a fool for the last time
I've looked at you for the last time
I've put my heart on the line
and nearly lost my mind
for the last time

All those times I believed you
and all those lies you told
the times I needed you the most
were the times you could be so cold

there was a time when I
I would have begged you to stay
Now you threaten to leave
so don't let me stand in your way

I've been a fool for the last time
I've trusted you for the last time
I put my heart on the line
and nearly lost my mind
for the last time

Now that I look back
and our love is just a memory
baby, you'll regret the love
you could have had with me

LEAD

Time and time again
I've swallowed my pride
hoping that you'll change
each time you hurt me more inside

Those words you're saying to me
they just cut me like a knife
now I don't want you around
yo get the hell out of my life

I've been a fool for the last time
I've trusted you for the last time
it's over now, we're through
and I've taken it from you
for the last time

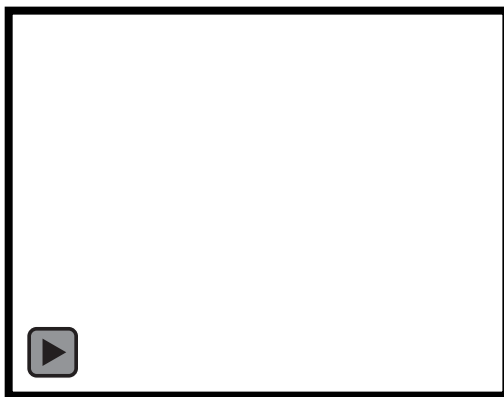
I've been a fool for the last time
I've trusted you for the last time
you pushed me around
and tried to bring me down
for the last time

back story:

I came into an amazing jazz and rock bassist named Wanda. She told me about a guitarist that she thought was amazing, John Toner. John brought over two of the songs he had previously created. This is one of them.

This song was recorded on 24-track analog tape, in a time before digital editing. This was recorded before I developed my preferred workflow. The rhythm guitar, bass, and drums were laid down in one session and then we punched in little fixes and changes here and there. When Gabrielle came in to lay down the vocals, she was confused. John, who was attending all of the recording sessions on this song, realized that some extra measures had accidentally been inserted into the beginning of the song. Rather than spend the time and money to start over again from scratch, I suggested that John add a mini-lead to fill in the extra measures.

“Infected Me”



© James F. Fahnstock, Bill Gunville, and Chip Lamb
hard rock

musicians:

- **lead vocals:** James F. Fahnstock
- **lead guitar:** Bill Gunville, Chip Lamb
- **rhythm guitar:** Bill Gunville, Chip Lamb
- **bass:** Jeff Yorke
- **drums:** Ian
- **producer:** Milo

“Rude Awakening”



© 1987 Misha (lyrics), W. Turner (lyrics, music), Chip Lamb (music)
hard rock

musicians:

- **lead vocals:** Gabrielle
- **lead guitar:** Chip Lamb
- **keyboards:** Jeff Avella
- **rhythm guitar:** Chip Lamb
- **bass:** Misha
- **drums:** Garix
- **drums:** Scott
- **producer:** Milo

lyrics

(Verse)

If I die, oh Lord, please take these dreams away from me
Rising high, the dragon standing right in front of me
Live or die, these dreams are waiting ever patiently
Mountainside, the changeling stalking ever after me

(Chorus)

And then you stare
on the outside looking in
what's the reason for the waiting

When you know not where you've been
And this side of sanity's breaking

Cuz the dragon sometimes wins
And the bad is for the taking
Taken by those for their sins
It's a goddam rude awakening

(Verse)

High and low, I'm searching somewhere for the bravery
Will it show, when my sword's racing towards some tragedy
But I know, this feeling's just the dragon's hold on me
So I go on facing each and every enemy

(Chorus)

(Verse)

Win or lose, we go on chasing every dream we've had
left to choose, the situations chosen shan't be bad
To refuse, would be to sanctify the mortal mad
We shall use each power given to the broken and the sad

(lead)

“Jack Hammer”



© Jeff Avella and James F. Fahnestock
hard rock

musicians:

- **lead vocals:** James F. Fahnestock
- **lead guitar:** Chip Lamb
- **rhythm guitar:** Chip Lamb
- **drums:** Garix
- **producer:** Milo

back story:

This song is a true story. Jeff Korman let us practice at night at his industrial unit (he was a laser artist, some of his laser effects were used in Paramount science fiction movies and he was involved in the lasers used for the Captain EO ride at Disneyland). One night the person in the industrial unit next door called the police for a noise violation. When the police showed up they said we could keep practicing because the sound wasn't reaching residential neighborhoods. After the police left, the guy next door used a jackhammer to tear up the concrete floor in his industrial unit, thinking he could drown out our music. He forgot we had amplifiers, which we could turn up. Jeff asked us to stop because he didn't want things to escalate to violence. We honored Jeff's request. Unfortunately, the next day the next day the operators of the industrial park evicted Jeff and the jackhammer guy.

“Remind Me Never/In Decision”



“Remind Me Never” © 1988 Chip Lamb (music), Jeff Avella (music), and Misha (lyrics)

“In Decision” © 1988 Jeff Avella (music and lyrics) and Misha (lyrics)

progressive rock

musicians:

- **lead vocals:** Gabrielle
- **lead guitar:** Chip Lamb
- **keyboards:** Jeff Avella
- **rhythm guitar:** Chip Lamb
- **bass:** Misha
- **drums:** Garix
- **drums:** Scott
- **rainsticks:** Joe Newberry
- **producer:** Milo

back story:

These were originally two different songs. When I was shuffling raw recordings from our practice sessions to optimize the order we played songs in our live sets, I noticed that the two songs flowed together really well. When I pointed this out at the next practice session, Jeff Avella fused the two songs into one.

Because the two songs originally had different tempos, Jeff had us speed up the second song to get it up to tempo.

This song was extremely popular in live shows. During the long instrumental break, the singer would leave the stage and then dramatically come back out when the singing on In Decision started.

The tempo change always sounded smooth to us in live shows. When we went to record it, hearing the tape (this was another 24-track analog recording) showed that the tempo change was not as smooth as we thought it was. It took several takes to finally get a smooth version of the tempo change.

The rainsticks were added to the recording several years later.

“You Might Be”



© James F. Fahnstock, Bill Gunville, and Chip Lamb
hard rock

musicians:

- **lead vocals:** James F. Fahnstock
- **lead guitar:** Bill Gunville, Chip Lamb
- **rhythm guitar:** Bill Gunville, Chip Lamb
- **bass:** Jeff Yorke
- **drums:** Ian
- **producer:** Milo

“Merry Christmas”



© 1991 Milo
holiday

musicians:

- **lead vocals:** Gabrielle and James F. Fahnestock
- **lead guitar:** John Toner and Chip Lamb
- **piano:** Billy Meza
- **keyboards:** Jeff Avella
- **rhythm guitar:** John Toner and Chip Lamb
- **bass:** Misha
- **drums:** Garix
- **percussion:** Milo
- **producer:** Milo

lyrics

music and lyrics by Milo

Merry Christmas
Merry Christmas
Merry Christmas
boys and girls

Merry Christmas
Merry Christmas
Merry Christmas
boys and girls

yes we want lots of presents
yes we want lots of presents
yes we want piles of toys

yes we want lots of presents

yes we want piles of toys
stacks and stacks of pretty toys
yes we want lots of presents
more and more and more

yes we want lots of presents
yes we want lots of presents
yes we want lots of presents
give em to us now

mmmm, hey Santa!
why don't you back that sleigh into my driveway?

yes we want lots of presents
yes we want lots of presents
yes we want piles of toys
yes we want lots of presents

yes we want piles of toys
stacks and stacks of pretty toys
yes we want lots of presents
more and more and more

yes we want lots of presents
yes we want piles of toys
yes we want lots of presents
give em to us now

yes we want lots of presents
yes we want lots of presents
yes we want piles of toys
yes we want shiny toys

yes we want piles of toys
stacks and piles and rows and aisles
yes we want lots of presents
more and more and more

yes we want lots of presents
yes we want lots of presents
yes we want lots of presents
give em to us now

Merry Christmas
Merry Christmas
Merry Christmas
boys and girls

Merry Christmas
Merry Christmas
Merry Christmas
boys and girls

back story:

The music at the beginning and end of the song was written for an assignment in a Music Theory and Composition class at Orange Coast College. The requirement was that the students compose a true cadence according to classical rules. The professor offered extra credit if the composition included Christmas related lyrics.